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ABSTRACT

GRADES OR AGES: Grades 7-12. SUBJECT MATTER: Physical education, including team sports, stunts, tumbling and gymnastics, track and field, swimming, individual and dual sports, physical education for the handicapped, outdoor education, and rhythmic activities. ORGANIZATION AND PHYSICAL APPEARANCE: The guide is divided into 16 chapters, each of which is straight text interspersed with extensive diagrams and illustrations. It is offset printed and perfect bound with a paper cover. OBJECTIVES AND ACTIVITIES: The first three chapters develop a philosophy of physical education and outline general objectives. The major portion of the guide consists of detailed descriptions for activities in the above-mentioned categories. Most of these descriptions are accompanied by lists of teaching suggestions and suggested safety precautions. A separate chapter on administration gives suggestions for time allotments for boys and girls at each grade level. INSTRUCTIONAL MATERIALS: Appendixes contain a bibliography, a list of sources for records and audiovisual aids, record forms, diagrams on utilization of facilities, and lists of equipment and supplies needed. STUDENT ASSESSMENT: A chapter on evaluation describes types of tests, both written and performance, and ways of using them. An appendix describes nine standardized tests and indicates their availability. (RT)

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GUIDE FOR TEACHING PHYSICAL EDUCATION

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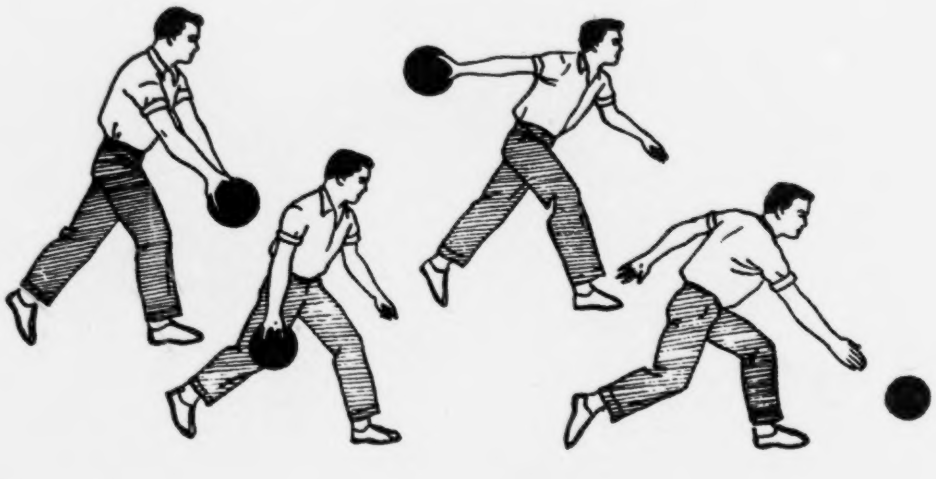

State Department of Education, Columbia, S. C.
Cyril B. Busbee, State Superintendent

1969

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FOREWORD

This guide is a revision of the *Secondary Physical Education Guide*, first published in 1961. It is prepared to assist physical education teachers, supervisors, and administrators in planning and developing an acceptable curriculum in every secondary school in this state.

Physical education makes a real contribution to the school curriculum in strengthening physical and mental health to meet the demands of contemporary society. Today's age of automation and space provides increased leisure time. A program of physical activity for all students in a variety of carry-over lifetime sports is vital for today and tomorrow.

The physical education instructor has an unusual opportunity to guide students in formulating sound attitudes and practices in the proper care of their bodies. The physical well-being of our boys and girls will be determined by the extent to which the physical education program is planned and coordinated in the school curriculum. Those who teach physical education have a special obligation to develop a meaningful, well-rounded program for all high school students.

State high school standards require that "a school's program shall include health and physical education for boys and girls and must be available in grades 9-12", unless they are physically or mentally unable to take the course. One unit is required for graduation, with two units permitted as part of the 18 required for a state high school diploma, according to the standards.

We hope that this publication will serve as a useful guide to a diversified program of this increasingly important phase of the high school curriculum.

CYRIL B. BUSBEE
State Superintendent of Education

INTRODUCTION

All secondary school students should have an opportunity to develop skills in a variety of lifetime sports for their present and future leisure time. Emphasis should be given to building a satisfying degree of physical fitness and a foundation for appreciation for physical activity.

This guide is intended to assist the teacher in planning and conducting a physical education program that meets the needs of all students, and to broaden the administrator's understanding of the values and outcomes of physical education.

"Physical Education in Retrospect" is presented in Chapter I. A summary of the historical development of physical education is important for understanding its purpose and value today.

Chapter II states the philosophy of "Physical Education as an Integral Part of Education." Topics in this chapter are: nature and demands of society, the purpose of education and physical education, definition and objectives of physical education, and the physically educated person.

"The Developmental Characteristics and Needs of the Adolescent" are outlined in Chapter III. Topics include child development, cardio-respiratory endurance, posture and body mechanics, health appraisal, and weight control problems.

"The Organization and Administration of an Acceptable Program" is presented in Chapter IV. Suggested time allotments are proposed. The chapter also covers legal responsibility and liability, credit, excuses, teacher load and class size, scheduling, teacher responsibility, grading, class records, student leaders, facilities, and evaluation.

"Physical Fitness" is explained in Chapter V. This chapter explains the approach and the changes produced by this important phase of the physical education program.

Chapters VI through XV include the broad categories of activities in the physical education curriculum.

In Chapter XVI, evaluation, approach, how to use information, how to select tests, and application of testing data are explained.

The appendices include suggestions for reference materials, record forms, utilization of facilities, tournament design, and equipment and supplies.

Physical education teachers and administrators are invited to contact the State Supervisor of Physical Education whenever assistance is needed for improving their program to supplement this Guide.

Office of General Instruction
Dr. W. Bruce Crowley, Director

ACKNOWLEDGMENTS

This publication replaces the 1961 edition bearing the same title. The material in this guide was prepared under the direction of the Division of Instruction of the State Department of Education with the cooperative efforts of many individuals and groups.

We wish to express our appreciation to the publishers, represented in the references for some of the materials used in the Guide.

We are indebted to the schools, colleges and universities in the state for making staff members available for committees who compiled materials, and to our colleagues in the State Department of Education for their time in editing, art work, and typing.

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Chapter
I

Physical Education in Retrospect

The status of physical education in a society has been determined in most part by the philosophies and ideals of that society. The amount and types of physical education practiced by a people reflects their philosophy and often reveals the dominant purpose of the state.[1]

Classic examples in history of the use of physical education as a means for developing military power and strength may be found in the time of the Persians under King Cyrus, in Sparta, in the Roman Empire, under Jahn in Germany, Nachtegall in Denmark, Ling in Sweden, and in France after her defeat by Prussia in 1870-71. Practically every country on the European continent was originally led to the physical education movement through military motives.[2]

At other times and in other places in history — when philosophies have been passive in nature or have attached little significance to the worth of the individual — there has been little regard for physical education. On the other hand, some societies have placed the individual on a very high plane and have practiced democratic forms of government. Under these conditions physical education has prevailed as a means of developing the individual and helping him reach his full potential.

NATIONAL HERITAGE

When the colonists came to America they brought no particular system of physical education with them. When they arrived in the New World conditions were not conducive to the development of a system of physical education. With the population 95 per cent rural there was neither time nor need for organized physical activities.[3]

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[1] Voltmer, E. F. and Arthur A. Esslinger, *The Organization and Administration of Physical Education*. New York: Appleton-Century-Crofts, Inc., 1967, p. 1.

[2] Rice, Emmett A., et.al *A Brief History of Physical Education*. New York: Ronald Press Company, 1958, p. 137.

The play instinct remained with the people, however, and most settlers engaged in the sports of their mother country as conditions permitted. This was especially true in Virginia and other English settlements where British sports were prominent. The Puritans, though, did not allow games, believing them contrary to the way of righteous living demanded of that sect.[4]

Physical education found no place in the schools during this early period. The possibilities and significance of play in education were not understood. The secondary schools had for their purpose preparation of students for college, not fitting them for participation in society.[5]

It was inevitable that in a free society systems of physical education would emerge, and that advocates of various systems of physical education and gymnastics would promote them.

Each of there systems had its share of followers for a time.

One of the major movements during the 1800's was the promotion of German gymnastics through the Turnvereine in America, but interest in gymnastics in the United States was not confined to this movement. The 1890's was a period of controversy between advocates of the various systems then in existence which served to stimulate an interest in physical education. This resulted in the widespread adoption of some physical education in the secondary school program.

The sports movement, YMCA and YWCA programs, college programs, and interest in physical education also had their effect and influence on the development of public school physical education. This process of evolvement has been an attempt to meet the needs of individuals in a democratic society.

Since the 1890's the place of physical education in the schools has been enhanced by the development and adoption of aims, objectives and practices which are in harmony with those of general education in a democracy. State legislation has given physical education a position equal in importance to other areas of the school's program.[6]

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[3] Ibid., p. 145.
[4] Ibid., p. 145.
[5] Ibid., p. 147.
[6] Ibid., p. 233.

In the 1900's two world wars, a depression, an industrial revolution, increased automation, and more leisure time have influenced the role of physical education in our society. Yet the emphasis in physical education's aims are in harmony with the aims of education: i.e., the development of the individual for effective participation in a free, democratic society.

STATE HERITAGE

The heritage of physical education in South Carolina parallels that of the other states. By 1925, thirty-three states had passed legislation prescribing physical training for the public schools. Among these was South Carolina, which passed its law requiring physical education in 1924.

In 1938 only 32 high and junior high schools in South Carolina offered physical education as part of their program of studies. By 1951 physical education was included in the program of studies of 251 high schools or 64%. Today, every school is required by law or standards to have a physical education program and one unit is required for the state high school diploma.

Chapter
II

Physical Education An Intregal Part of Education

Today's rapidly changing society places many demands upon education and physical education. Never has the need for the wise use of leisure been more acute nor more essential.

The purpose of this chapter is to discuss the meaning of physical education during contemporary America and to define its role in our modern educational system.

NATURE AND DEMANDS OF SOCIETY

To accomplish the goals of education, it is important for the teacher to understand the changing world in which he and his students work and play. Because the majority of our people are now living in or near urban centers, there is a need for more physical exercise which 50 years ago was supplied through the chores of the day. Not only are people moving into cities, but they are also moving from city to city, necessitating adjustments to new communities and people. Recreational skills are an advantage in making new friends.

Increasing urbanization and the population explosion are taking up much space for recreation.

Technological advancements have created the assembly line, automation, pushbutton conveniences, computer living and, consequently, more leisure time. These changes emphasize the need for carry-over sports and exercises which can be enjoyed in later years both for physical activity and release of tension.

Today's youth are not as active physically as their parents were. It has been estimated that 95% of the average child's waking hours are spent sitting.[1] An examination of the high school student parking lot will verify the fact that the automobile is replacing the foot as a means of transportation.

In the years to come it is anticipated that United States citizens will continue to increase their incomes, thus opening to them more recreational interests. A shorter work week seems a certainty in the future, as does early retirement and a greater proportion of senior citizens. But the fast pace of twentieth century living seems to offer little hope for a reduction in tensions and their resulting problems. These facts clearly show the need for recreational skills which include exercise.

Education will, undoubtedly, undergo many changes. Team teaching, use of master teachers, educational television, and programmed instruction are becoming more widely used in our educational systems.

THE PURPOSE OF EDUCATION AND PHYSICAL EDUCATION

In this country, education is planned to meet the needs of the citizenry and is concerned with the individual student. According to Oberteuffer and Ulrich "the aim of education is the development of the individual to the utmost of his potentialities."[2] They further say that the goal of education is the improvement of society as a whole and the development of the individual as he seeks to enrich that society.[3] Physical education, too, must also accept this aim as its own.

The Educational Policies Commission lists four general objectives of education: self-realization, human relationships, economic efficiency, and civic responsibility.[4] It is apparent that physical education can make important contributions in each of these areas.

DEFINITIONS OF PHYSICAL EDUCATION

In several recent publications authors have objected to the term "physical education", arguing that it implies education of the physical and that other disciplines are not referred to as "History Education," or "Chemistry Education."

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[1] AAHPER. *Your Child Can't Sit and Keep Fit.* Washington, D. C.: 1961, p. 1.

[2] Oberteuffer, Delbert and Celeste Ulrich. *Physical Education.* New York: Harper and Row, 1962, p. 286.

[3] Ibid., p. 286.

[4] Bucher, Charles A. *Foundation of Physical Education.* St. Louis; The C. V. Mosby Co., 1964, p. 26

While various authorities have endeavored to define physical education and to delineate its objectives, there are a noticeable number of similarities in their efforts. Although their emphasis may differ, all perceive of it as education and most refer to activity or movement as the media through which learning occurs.

Williams defines physical education as "the sum of man's physical activities, selected as to kind and conducted as to outcomes." The phrases "selected as to kind" and "conducted as to outcomes" imply both that choices must be made and planning must occur.[5] Cassidy defines total physical education as "the sum of the changes in the individual caused by experiences centering in basic movement patterns."[6] Bucher has proposed the following definition: "Physical education, an integral part of the total education process, is a field of endeavor that has as its aim the development of physically, mentally, emotionally, and socially fit citizens through the medium of physical activities that have been selected with a view to realizing these outcomes."[7]

OBJECTIVES OF PHYSICAL EDUCATION

Many physical education experts divide the objectives of physical education into four categories. These are organic development, interpretive development, neuromuscular development, and personal-social adjustment.[8] The Society of State Directors of Health, Physical Education, and Recreation states that physical education has significant contributions to make toward desirable educational outcomes because it:

"—is designed to promote the growth, health, development, and maintenance of the individual physically, mentally, socially, emotionally, and ethically.

—is the area of the curriculum which makes major contributions to physical fitness including strength, endurance, power, flexibility, agility, balance, speed, and coordination.

—is education through, as well as of, the physical.

—is an opportunity for the individual to develop acceptable values and perception of self and others.

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[5] Williams, Jesse Feiring, *The Principles of Physical Education.* Philadelphia; W. B. Saunders Co., 1964, pp. 12-13.

[6] Cassidy, Rosalind. *Curriculum Development In Physical Education.* New York: Harper and Brothers, 1954, p. 134.

[7] Bucher, op. cit., p. 31.

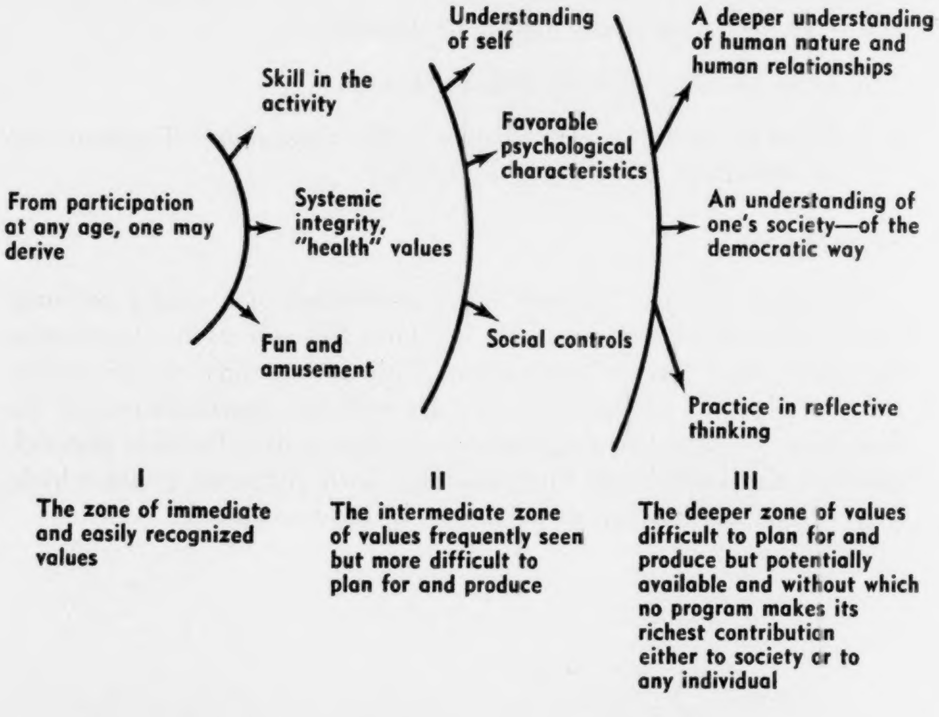
[8] Ibid., p. 147.

—is a designed sequence of movement experiences in a variety of activities ranging from simple to complex.

—is education for constructive use of leisure time."[9]

Oberteuffer and Ulrich describe the outcomes of physical education in terms of those which can be obtained quickly, those which are more difficult to accomplish, and those which have outstanding value but are difficult to produce. These can best be illustrated in chart form:[10]

CHART I
OBJECTIVES OF PHYSICAL EDUCATION


From participation at any age, one may derive
Skill in the activity
Systemic integrity, "health" values
Fun and amusement
Understanding of self
Favorable psychological characteristics
Social controls
A deeper understanding of human nature and human relationships
An understanding of one's society—of the democratic way
Practice in reflective thinking
I
The zone of immediate and easily recognized values
II
The intermediate zone of values frequently seen but more difficult to plan for and produce
III
The deeper zone of values difficult to plan for and produce but potentially available and without which no program makes its richest contribution either to society or to any individual

THE PHYSICALLY EDUCATED PERSON

The following questions, answered in the affirmative, will probably indicate that the objectives of physical education are being accomplished and that physical education is contributing to the goals of education:[11]

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[9] Society of State Directors of Health, Physical Education and Recreation, *A Statement of Basic Beliefs*. Washington, D. C.: 1964, p. 8.

[10] Oberteuffer and Ulrich. op. cit., p. 29.

(From Oberteuffer, Delbert and Celeste Ulrich. *Physical Education*. New York: Harper and Row, 1962, p. 29. By permission.)

1. Is he physically fit?
2. Does he realize the importance of general fitness and its relationship to his health and happiness?
3. Does he understand the basic physiological principles involved in the development and maintenance of fitness?
4. Is he equipped with sufficient recreational skills to enable him to participate in a wide variety of activities well enough to enjoy himself?
5. Does he have knowledge and understanding of recreational facilities?
6. Can he participate in mixed groups?
7. Does he have skill in social graces?
8. Does he have poise and grace in the fundamental movements of standing, walking, and sitting?

SUMMARY

Essential to every teacher is the possession of a sound personal philosophy of education which includes the role of his particular discipline as a part of education. This philosophy should establish the place of education in society and the contributions of the discipline toward the attainment of these goals. To such generalizations the individual must add his own personal goals which, hopefully, will mature as he grows in his profession.

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[11] Mathews, Donald K. *Measurement in Physical Education.* Philadelphia: W. B. Saunders Company, 1963, p. 10.

Chapter III

Developmental Characteristics and Needs of the Adolescent

The period of adolescence is generally considered to extend from about the twelfth year to the twentieth, and is characterized by continuous and gradual physical, social, emotional, and learning changes.

A wise selection of instructional materials and professional leadership assures desirable outcomes, *when the youth remains the central point of reference.* This provision demands that the teacher and the adminstrator recognize the physical, mental, social, and emotional signs of growth and development in boys and girls.

Significant characteristics may be reflected by each student's appearance (physical), feelings (emotional), and actions (social) Information concerning these characteristics for grades 7-8, 9-10, and 11-12 has been outlined in the following charts.

It should be thoroughly understood that growth and change are continuous, with a great deal of overlapping in both growth gradients and behavior characteristics. Fortunately it is possible to predict characteristics and needs and to offer possible solutions to needs within a general framework. Thus the charts may be of great value to the teacher who uses them as points of reference in program planning.

STUDENT DEVELOPMENT

Among the outstanding achievements of the junior high school has been its recognition of the needs of boys in the active period of early adolescence. These years bridge the gap between elementary grades and high school. A well-planned physical education program can contribute much to the development of these young people at this important period in their lives.

Physical education activities should be varied and the skills broad enough in nature that even the student with poorest physical ability may find some satisfaction of success by becoming "superior" in some activity. Junior high school students are at a stage of development when cooperation, team play, and organization are important in their lives.

The junior high school provides learning experiences that will not only prepare all students for senior high school, but also for the social life of the world. Physical education activities can become essential stabilizers in an age of strain and competition and in a civilization which now makes great provisions for passive and inactive types of recreation.[1]

Chart II, page 11, presents the characteristics and needs of grades 7 and 8 along with their meaning for physical education.

For adolescents in grades 9 and 10, today's world often seems out of gear with their own potentialities. Dozens of "environmental hammers" beat upon them. These are family, neighborhood, companions, church, school, traditions, customs, laws, and their own "inner-selves." The adolescent's role in society and his ideas concerning himself are powerful directional forces in his life. Chart III, page 12, indicates the characteristics and neede of these students along with their meaning for the physical education program.

During their junior and senior years, students go through a rapid and uneven growth, both mentally and physically, but are reaching relative stabilization and maturity. Recreational interests now grow more specialized and more highly organized. Chart IV, page 13, indicates the characteristics and needs of juniors and seniors along with their meaning for physical education programs.

Cardio-Respiratory Endurance

In later childhood the heart and lungs are more nearly in proportion to height and weight. This permits vigorous activities, such as team games, stunts, and dances. Endurance will pick up

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[1] Cowell, Charles C. and Helen W. Hazelton. *Curriculum Designs In Physical Education*. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1955, p. 209.

CHART II
CHARACTERISTICS AND NEEDS OF GRADE 7 AND 8 YOUTH

PHYSICAL	MENTAL	SOCIAL AND EMOTIONAL	MEANING FOR PHYSICAL EDUCATION
1. Need rest similar to adults (8-8½ hrs).	1. Desire to learn deepens.	1. Hero and heroine worship prevalent.	1. It is essential that much time be devoted to drills of selected activity.
2. Feel that they have unlimited resistance and sources of energy.	2. Expend much energy in fantasies.	2. Desire for belonging to some group.	2. Wide variety of small and large group games is necessary.
3. Tire easily but are reluctant to admit it.	3. Consciousness of sex increases.	3. Recognize morals and ethics of our culture.	3. Many activities can be taught coeducationally.
4. Tend to resist getting sufficient sleep and have less energy for studies.	4. Interest in technical subjects increases.	4. Desire excitement and adventure.	4. Many class teams should be provided whereby all who desire may become team members.
5. Period of rapid growth development causes increase in appetite or "finickiness" with loss of appetite.	5. Abstract reasoning develops.	5. Emotions are easily aroused and swayed.	5. Teachers should provide many self-testing activities and keep records of individual performances.
6. Show interest in rudimentary knowledge of first aid principles.	6. Attention span increases.	6. Girls usually interested in boys.	6. Teachers should provide many lead-up games and fundamental aspects of team play.
7. Exhibit increased sexual tension.	7. Curious and concerned about all happenings and often worried over small matters.	7. Desire for group status is strong.	7. Students should be scheduled for physical education classes by grades, with no more than two consecutive grade levels in any one class.
8. Frequently appear awkward and poorly coordinated.	8. Imitation of adults prevalent.	8. Permanent friendships begin to develop.	
9. Boys are faster and stronger than girls.	9. Enjoy practice for improvement.	9. Desire to be like classmates.	
10. Girls are over a year more sexually mature.		10. Often shy, self-conscious, and lack self-confidence.	
11. Ready for higher game skills.		11. Show-off attitude still present.	
		12. Resist authority.	
		13. Interests are narrowed.	
		14. Crushes on same or opposite sex often develop.	
		15. Tend to be moody, unstable, and restless.	

CHART III
CHARACTERISTICS AND NEEDS OF GRADE 9 AND 10 YOUTH

PHYSICAL	MENTAL	SOCIAL AND EMOTIONAL	MEANING FOR PHYSICAL EDUCATION
1. Period of rapid growth and development, especially for boys who are catching up with girls in size and weight.	1. Power of reasoning is fairly well developed.	1. Display emotions, sometimes uncontrolled.	1. Provide experience for development of self-discovery.
2. Practically all students will have reached puberty by end of this period.	2. Interested in using own thinking as means of gaining independence, begin rebellion against parental authority.	2. Desire adventure and excitement.	2. Provide activities to reflect goals of mental development.
3. Rapid increase in muscular development, strength, endurance, speed, and coordination.	3. Eager to perfect skills.	3. Desire friends of the opposite sex, to date, and to follow adult patterns socially.	3. Help individuals evolve value-systems based on relationships to their fellow man.
4. Great deal of difficulty with skin disorders, budding beards in boys due to sex hormones.	4. Become aware of attitudes on issues and policies to which they formerly gave little attention.	4. Show greater interest in social relationships and dancing.	4. Build efficient, well-coordinated bodies.
5. Definite secondary sex characteristics and changes in physical proportions appear.	5. Imitation is popular.	5. Show concern about physical attractiveness, dress, and appearance.	5. Stress recreational skills.
	6. Initiative increases.	6. Display strong group loyalties and are anxious to conform to group standards in matters of dress, dating, and allowance.	6. Give students some freedom of choice with guidance.
	7. Interest is shown in the choice of a vocation.	7. Begin to develop permanent friendships; have "crushes."	7. Use marks and prizes sparingly as extrinsic incentives and foster fun, joy, challenge, and fellowship of activities.
		8. Are less responsible due to fear of failure; need encouragement.	
		9. Boys prefer group games; girls prefer individual activities.	

CHART IV
CHARACTERISTICS AND NEEDS OF GRADE 11 AND 12 YOUTH

PHYSICAL	MENTAL	SOCIAL AND EMOTIONAL	MEANING FOR
1. Gain greatly in muscular strength and endurance.	1. Mental span ability and desire to think for themselves increase.	1. Are aware of and sensitive to opposite sex.	1. Instruction should be directed toward higher development of skills in social and coeducational activities.
2. Boys have almost fully developed physiques; girls develop body proportions.	2. Mental growth is about mature; experience is needed.	2. Most girls are interested in diets and exercise because of weight and figure.	2. Instruction should provide for participation in many activities other than competitive types.
3. Are outgrowing awkward stage.	3. Interest is in ideals and important decisions in matters of education, vocation, sex, marriage, world affairs, and religion.	3. Show interest in choosing a vocation.	3. Instruction should include activities which will enable students to participate with adult groups outside school.
4. Expend tremendous energies and build up tremendous appetites.		4. Are getting away from adult protection.	4. Instruction should include many recreational activities and carry-over sports (golf, tennis, fishing, bowling, etc.).
5. Suffer from skin disorders.		5. Evidence interest in social development.	5. Teachers should expand the program of coeducational activities.
6. Require sleep and rest about equal to adults.		6. Desire excitement and adventure.	6. A stepped-up program for boys should not be carried on at the expense of girls' program.
7. Improve coordination.		7. Become more conscious of dress and appearance.	
8. Develop adult sex characteristics.		8. Are more independent.	
		9. Show great desire to succeed.	
		10. Develop strong friendships.	
		11. Resent restrictions by parents or teachers.	
		12. Are greatly influenced by group opinion.	

and last longer. During these years of growth and development, the strength and endurance of youth demands challenge.

Posture and Body Mechanics

The proper mechanical use of the body goes beyond its effect upon appearance and personality. It affects efficiency. The correct mechanical use of the body requires minimum muscular movement. Posture tests should be administered annually and proper notation made on the students' cumulative health records. The teacher should encourage proper use of the body by adequate nutrition and rest, vigorous exercise, proper habits of standing and sitting, and correct habits of work. The development of good posture takes work; the habit is not formed in a day. It may be necessary to add specially planned exercises if faulty posture has become habitual.

Health Appraisal

Every student should have a health appraisal. This appraisal should include identifying pupils with correctable orthopedic and other health problems and subsequent referral to medical authorities; posture check, including foot examinations; height and weight measurements; and other health appraisals listed in the *Guide for Teaching Health, Grades* 1-12, and other State Department of Education publications. Resources of the home, supplemented by available school and community services necessary, should be a part of the program. The family physician and dentist should be consulted for periodic examinations and correction of any disabilities when possible.

Weight Control

Excessive accumulation of fat at the waistline, hips, and neck is the most common sign of obesity. In addition there may be a general distribution of fatty tissue over the entire body. Efforts to reduce weight must be based on understanding the cause of the problem. A medical examination is necessary to determine the cause of obesity. When the cause has been ascertained, treatment may be executed upon the advice of the physician.

The general signs of undernutrition may be noted in the skin, posture, muscle development, energy level, and resistance to disease. The skin is lacking in normal color and may be rough. The posture is poor, due largely to muscle weakness and low energy levels. The muscles are not full and firm. Fatigue sets in quickly when engaging in vigorous activity.

Overweight and underweight students will need help to find causes of their problems and to encourage maintaining recommended procedures. Contact with parents might be advisable.

Both types of students should be discouraged from participating in activities that they can do neither safely nor well. Program planning should be influenced strongly by needs. General conditioning exercises are beneficial. In either case, it should be made clear that maintaining a balance between caloric input and output and other health measures are essential.

The teacher should help other class members develop favorable attitudes toward those who deviate in size, appearance, or functional ability. The teacher can help these students by guiding them to sources for basic treatment of their problems, by personal guidance and encouragement, and by providing sound developmental experiences.

Chapter IV

Organization and Administration of An Acceptable Program

The success of physical education in meeting the needs of those it serves is determined to a large degree by its organization and administration. The teacher of physical education, the principal and the superintendent have the cooperative responsibility for making adequate provisions for a comprehensive and continuous program. Band, chorus, a fifth subject, driver education, ROTC baton twirling, athletics, or marching drill units should not be substituted for physical education.

The principal and/or superintendent may help provide for a successful physical education program by:

1. Developing understanding of the physical education program's purposes, scope and content.
2. Providing certified teachers of physical education—a man for the boys' program and a woman for the girls' program.
3. Cooperating with the teachers of physical education in formulating policies for the entire physical education program, including intra- and inter-school athletics.
4. Assisting physical education teachers in planning and conducting the school health education program.
5. Making the strongest possible effort, consistent with available resources, to provide adequate facilities, equipment, and supplies for a well-balanced program.
6. Scheduling physical education classes so as to group students by grade and reasonable class size to facilitate instruction.

7. Consulting and assisting physical education teachers in preparing a budget adequate to provide sufficient material resources for conducting a broad and varied program.
8. Encouraging the teachers to evaluate their programs in a manner consistent with general school policies and practices.
9. Helping to interpret physical education to school trustees, parents, and the community in general.

Time Allotment

The ideal program should include all students in grades 7-12 in a five-day-a-week period. The minimum daily instructional period should be a standard class period. Where facilities and personnel are too limited to meet this ideal, it is recommended that students be scheduled in physical education according to a minimum program as stated in the "Standards for Accredited High Schools of South Carolina".

The following charts are designed to offer suggestions to the teacher in planning the year's program.

Chart V shows the percentage of time in the total year's plan which may be devoted to each category of activities.

CHART V

Junior and Senior High School Grades 7-12	*Boys*	*Girls*
1. *Administrative activities	7%	7%
2. Conditioning, combative, and self-testing activities	8%	8%
3. Team sports	30%	25%
4. Games of low organization and relays	8%	8%
5. Stunts, tumbling and gymnastics	10%	10%
6. Rhythmic activities	15%	20%
7. Recreational activities, individual and dual sports, and outdoor education	15%	15%
8. Track and field	7%	7%
Total	100%	100%

Chart VI shows a sample seasonal time allotment in weeks for a yearly plan. Instructors must choose the season for teaching activities.

***Locker assignments, height and weight checks, mid-term and final exams, general motor ability tests, physical fitness tests.**

CHART VI

A Sample Seasonal Time Allotment in Weeks for Yearly Plan for Physical Education Activities

	Fall						Winter						Spring					
	Boys			Girls			Boys			Girls			Boys			Girls		
Activity	7-8	9-10	11-12	7-8	9-10	11-12	7-8	9-10	11-12	7-8	9-10	11-12	7-8	9-10	11-12	7-8	9-10	11-12
Class Organization and administration	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Touch Football	3*	4	4															
Soccer	3	3	3	3	4	4												
Speedball				3	3	3												
Hall Ball				3	3	4												
Field Hockey	3	3	3	3	3	3												
Softball													4	4	4	4	4	4
Volleyball							3	3	3	3	3	3	3	3	3	3	3	3
Basketball							4	4	4	4*	4	4						
Stunts-Tumbling-Gymnastics							4	3	3	3	3	3	4	3	3	3	3	3
Rhythms							3	3	3	5	5	5						
Track and Field													3	4	4	3	3	2
Group Games and Relays	3	3	2	3	3	2							3	3	2	3	3	2
Testing and Evaluation							2 weeks in total yearly program											
Recreational Games-Outdoor Education	3	3	4	3	3	4	3	3	4	3	3	4	3	3	4	3	3	4
Individual and Dual Sports	3	3	6	3	3	6							3	3	6	3	3	6

*Modified to meet age level of participants.

Note: It is impossible for the teacher to teach all activities listed in the number of weeks designated. Selection of activities and time allotment will vary according to pupil needs, interests, and abilities.

Chart VII shows a suggested year's curriculum. Instructors should plan a progressive program starting with the seventh grade and each activity with objectives should be numbered to correspond with the year and sequence of teaching. Example: Volleyball I — 7th grade; Volleyball II — 8th grade; Volleyball III — 9th grade; Volleyball IV — 10th grade; Volleyball V — 11th or 12th grades. The symbol "E" represents an elective activity.

Instructors are encouraged to schedule several elective activities in grades 11 and 12 for students' individual interest, needs, and abilities. These activities should have carry-over value. The Lifetime Sports Education Project of AAHPER, initiated in the summer of 1965, is an effort to increase participation in the sports which may be enjoyed throughout life. The project coordinates activities of eight AAHPER divisions, with special emphasis on those programs which teach lifetime sports, particularly golf, bowling, and the racquet sports. The AAHPER Outdoor Education Project also supports archery, casting, shooting, and gun safety.

CHART VII

SUGGESTED YEARLY CURRICULUM FOR PHYSICAL EDUCATION SECONDARY SCHOOLS OF SOUTH CAROLINA

Date	Boys Activity	Weeks		Girls Activity	Weeks
Aug. 31-Sept. 4	Administration	1	Aug. 31-Sept. 4	Administration	1
Sept. 7-Sept. 11	Physical Fitness Testing	1	Sept. 7-Sept. 11	Physical Fitness Testing	1
Sept. 14-Oct. 9	Touch Football	4	Sept. 14-Oct. 9	Soccer	4
Oct. 12-Oct. 30	Soccer Goal Ball	3	Oct. 12-Oct. 30	Volleyball	3
Nov. 2-Nov. 25	Volleyball	3	Nov. 2-Nov. 25	*Individual and Dual Sports	3
Nov. 30-Dec. 18	Rhythms	3	Nov. 30-Dec. 18	Rhythms	3
Jan. 4-Jan. 29	Stunts and Tumbling	4	Jan. 4-Jan. 29	Basketball	4
Feb. 1-Feb. 26	Basketball	4	Feb. 1-Feb. 26	Stunts and Tumbling	4
March 1-March 5	Physical Fitness Testing	1	March 1-March 5	Physical Fitness Testing	1
March 8-March 26	*Individual and Dual Sports	3	March 8-March 26	Relays, Low Organization Games	3
March 29-April 9	Relays, Low Organization Games	2	March 29-April 9	Modern and Creative Rhythms	2
April 12-April 30	Track and Field	3	April 12-April 30	Track and Field	3
May 3-May 21	Softball	3	May 3-May 21	Softball	3
May 24-May 28	Administration and Final Examination	1	May 24-May 28	Administration and Final Examination	1
		36 wks.			36 wks.

Activities should be planned and taught progressively by grade level. The curriculum is based on a *five-day week* program.

*Individual and dual sports should include such simultaneous activities as: badminton, bowling, paddle tennis, shuffleboard, table tennis, etc. Tennis, golf, archery, and fencing may be alternated in a unit. Swimming should be scheduled when a pool is accessible to the school.

Suggested Scheduled Plans

Plan 1. Daily schedule of physical education for both boys and girls is required for one unit of credit in grades 9-12.

Plan 2. Alternate Health Instruction with Physical Education. During the first semester, boys will have physical education three days a week and health instruction two days a week. Girls will take physical education twice a week and health instruction three days. During the second semester, boys will have health instruction three days a week and physical education two days. The girls will have health instruction two days a week and physical education three days. This plan is recommended where adequate facilities are not available for a daily physical education program.

1st Semester	Monday	Tuesday	Wednesday	Thursday	Friday
Boys	Physical Education	Health	Physical Education	Health	Physical Education
Girls	Health	Physical Education	Health	Physical Education	Health

2nd Semester	Monday	Tuesday	Wednesday	Thursday	Friday
Boys	Health	Physical Education	Health	Physical Education	Health
Girls	Physical Education	Health	Physical Education	Health	Physical Education

Plan 3. Physical Education may be scheduled three days a week and other subjects the other two days. Students must have 90 periods of physical education for ½ unit of credit in grades 9-12. This plan would require two years for students to satisfy graduation requirements of one unit.

Monday	Tuesday	Wednesday	Thursday	Friday
Physical Education	Other Subject	Physical Education	Other Subject	Physical Education

Plan 4. Physical Education two days a week, Health Instruction two days a week, and coeducational activities once a week.

	Monday	Tuesday	Wednesday	Thursday	Friday
Boys	Physical Education	Health	Physical Education	Health	Coeducational Activities
Girls	Health	Physical Education	Health	Physical Education	Coeducational Activities

Legal Responsibility

The legal responsibility for providing suitable programs of physical education, including facilities, equipment, and teachers, is that of the local board of trustees in each school district.

The implementation of this law is the responsibility of the State Board of Education which sets up requirements for schools through adopted standards.

Section 21-416 of the School Laws of South Carolina reads:

"There shall be established and provided in all public schools of this state physical education, training and instruction of pupils of both sexes, and every pupil attending any such school, insofar as he is physically fit and able to do so, shall take the course or courses therein as provided by this section. Suitable modified courses shall be provided for students physically or mentally unable or unfit to take the course or courses prescribed for normal pupils."

Credit for Physical Education

State High School Standards require physical education as an integral part of the school program. These provisions are:

Seventh and eight grade pupils shall receive instruction for a minimum of 250 minutes per week for 36 weeks in each of the following:

1. Language Arts
2. Mathematics
3. Science
4. Social Studies — Grade 7
5. Social Studies — Grade 8
6. Health and Physical Education (May be scheduled for two or three days per week)

One unit in physical education is required for a state high school diploma. Two units may be applied for graduates of 1970 or later.

Credit for physical education must be awarded as follows:

1. Alternate-day program for full year — 90 days — ½ unit.
2. Semester program — 5 days per week — 90 days — ½ unit.
3. Yearly program — 5 days per week — 180 days — 1 unit.

Teacher Load and Class Size

The number of instructional periods for physical education teachers should be consistent with the teacher load of academic subject matter teachers.

For best results it is recommended that 40 students be considered as maximum, and 10 students as minimum for physical education classes. The physical education class should be made up of not more than two consecutive grades at any one period. Physical education is ideally scheduled by grades as in other subject matter areas.

Teacher Responsibilities, Competencies and Attitudes

The physical education teacher should possess the same qualifications as other members of the faculty and accept the same duties and responsibilities. Success in teaching should be measured in terms of the program's effect on the students.

A constant evaluation of the objectives of the physical education profession is the teacher's responsibility. It is the duty, privilege and obligation for physical education teachers to maintain membership and to participate in local, state and national associations, both in general education and in their specialized field.

All students demand as much knowledge, planning, understanding , creativeness, patience, and sincere interest as the physical education teacher can muster.

The teacher must know characteristics and needs of boys and girls, must have a well planned program, and must be able to measure and evaluate results.

Legal Liability

The teacher is legally responsible for the safety of students. Under state law, a school district is not liable for damages as a result of injury suffered by a student while at school. The school district has sovereign immunity from suit. This immunity, however, does not absolve individuals of liability.

If the teacher has exercised ordinary care and supervision in the management of students, a lawsuit is not likely to occur. A teacher's negligence which results in injury to a student makes that teacher liable. It is extremely important that the teacher exercise proper supervision, especially in physical education.

Excuses

Physical educators and school administrators should work closely with local doctors to establish guidelines that will control indiscriminate granting of excuses requested by parents. The school is encouraged to have a printed form for the physician that will indicate what activities students can or cannot participate in safely according to their condition.

Fewer requests for excuses will be received when parents, family physicians, and the general public understand the values derived from participation in a good program.

Students should not be excused from physical education for other school activities. Teachers should exercise caution and good judgment in handling temporary excuses, consistent with school policy.

Grading

A grading system comparable to that used by the school in other subjects should be used in grading physical education students. Grades on student achievement in physical education should receive the same consideration as all other subjects in the curriculum when figuring student averages. (See Chapter XVI on Evaluation for a more detailed suggested grading plan).

Class Records and Organization

Uniform, accurate, and neat records must be kept by physical education teachers.

It is the responsibility of the teacher to make the most efficient use of class time. The objective of developing a minimum of 15 minutes of physical fitness should be an outcome of every period. Below is a suggested daily class time allotment for a 55-minute class period:

Dressing	(5-7 minutes)
Roll call	(1 minute)
Conditioning activities	(8-10 minutes)
Fundamental skills[1]	(20 minutes)
Game or activity[1]	(10 minutes)
Showers and dressing	(10 minutes)

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[1] Time allotments for these activities will vary according to their newness and purposes and the student's progress in achieving essential skills.

It is recommended that all students change to appropriate apparel for activity periods and that showers be taken following the activity. Schools should provide towel service to insure good health habits.

Boys and girls should be scheduled in separate classes and it is advisable to schedule students by grade level. The teacher can best serve individual needs when proper classification of students has been completed. Methods of classifying students are medical examinations, physical fitness tests, sports skill tests, classification indicies or general motor ability tests.

Use of Student Leaders

The following suggestions for the use of student leaders may prove helpful to physical education teachers in the organization of programs.

1. Choose one squad leader for each group of 6 to 12 members, depending on the size of the class. Generally four to six squads permit better organization and rotation.
2. Squad leaders may take attendance, keep records, check shower and locker rooms, direct rotation of squads from one activity to another, and help arrange equipment.
3. When practical, a leadership club may be formed.

Facilities, Equipment and Supplies

Physical education facilities should be planned to serve adequately for physical education classes, intramurals, interscholastic athletics and after school and community recreation. The gymnasium, shower and dressing rooms, storage rooms, exercise room, and instructors' offices should be large enough to accommodate the total program. Varsity teams should have separate facilities to avoid overcrowded conditions.

The outdoor area should be developed for maximum use. Proper grading, drainage, and turfing are important for suitable teaching stations that involve a variety of activities. A multi-purpose, hard-surfaced area is a valuable asset for class instruction in tennis, basketball, volleyball, paddle tennis, bowling, and shuffleboard.

The physical education program of activities will be no stronger than the amount and kind of equipment and supplies. Adequate equipment and supplies are necessary for a quality program. (See appendix E for suggested lists).

The local board of trustees is responsible for financing the physical education program. An annual budget for physical education equipment and supplies should be a part of every school appropriation. Planning the purchase of equipment and supplies can be systematically organized to prevent excessive needs in any given year.

Physical education personnel are responsible for the inventory, informing the administration of needs, preparation of the budget with the approval of the principal, utilizing resources to the fullest extent for student participation, careful use and storage of equipment and supplies, and the safe, healthful condition of facilities.

Providing for Individual Differences

The teacher of physical education should plan and conduct a program that will benefit every student. This means that underdeveloped, unskilled and exceptional students, as well as the skilled and healthy, will be provided an opportunity to participate in activities best suited to their abilities. (See Chapter XII, Physical Education for the Exceptional Student).

Evaluation

Every physical education teacher should evaluate his program from the results of various achievements shown by the students in physical, mental, moral, and social development. Effective teaching will show results through students' increased strength, endurance, knowledge of a variety of activities, skill performance, attitude, participation in lifetime sports, and desirable social traits.

Chapter
V

Physical Fitness

Contemporary man is no different from primitive man in his need to meet certain basic physical requirements.

A person who is physically fit possesses the strength and stamina to carry out his daily tasks without undue fatigue, he maintains enough energy to enjoy leisure and to meet unforeseen emergencies. The day has long since passed when physical development could be left to chance.

In 1960 President John F. Kennedy said:

"All of us must consider our own responsibilities for the physical vigor of our children and of the young men and women of our community. We do not want our children to become a generation of spectators. Rather, we want each of them to be a participant in the vigorous life."[1]

The American Medical Association issued a joint statement with the American Association for Health, Physical Education and Recreation which reads in part:

"Exercise is one of the most important factors contributing to total fitness. Active games, sports, swimming, ryhthmic activities, prescribed exercises . . . All can make distinctive, as well as worthwhile contributions, to fitness."[2]

A regular exercise program has the following beneficial effects:

1. Helps us look, feel and work better; improves organic tone and functioning.

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[1] John F. Kennedy. "The Soft American", Sports Illustrated Magazine, December 26, 1960.

[2] American Medical Journal, April, 1958.

2. Necessary to full development of maturing children.
3. Prevents and controls obesity.
4. Helps to keep a healthy heart and to prevent cardiovascular disease.
5. Assists the ill and impaired in their rehabilitation.
6. Provides a release from tension and emotional stress.
7. Helps preserve physical and mental capacities and can delay the aging process.
8. Aids in meeting emergencies.
9. Helps the individual develop ability to act and move more efficiently and gracefully, to maintain good posture and attractive appearance.[1]

The "blue book", *Youth Physical Fitness, by the President's* Council on Physical Fitness and Sports suggests a recommended basic school program. The four major points are: health appraisal, identification of the physically-underdeveloped pupil, vigorous daily activity, and tests for analysis of needs, measurement of progress and motivation.

The President's Council on Physical Fitness and Sports is a continuation of the President's Council on Youth Fitness, which was created by executive order on July 16, 1956. The name was changed January 9, 1963, to clarify the Council's assignment and to encompass adult fitness, community recreation, and other areas in its work.

The Council's goals are to urge all schools to strive for quality health and physical education programs emphasizing physical fitness. It also urges all Americans — young and old — to make regular exercise, participation in sports and games, and good health habits a part of their way of life.

In 1965 President Lyndon B. Johnson said:

"The fitness of our nation for the tasks of our times can never be greater than the general physical fitness of our citizens. A people proud of their collective heritage will take pride in their health, because we cannot stay strong as a country if we go soft as citizens.

The Journal of the American Osteopathic Association, November 1963, Keynote address, presented at the 68th Annual Convention of the AOA, New Orleans; September 30, 1963, by Simon A. McNeely, Director of Federal-State Relations, Presidents Council on Physical Fitness.

"In the past few years there has been a wholesome and welcome reawakening of pride and self-respect among us about our individual fitness. In all our communities we ought to come to grips with the challenge of increasing the use and availability of the recreation facilities of our schools — for more hours each day, more days each year, for more members of the families in the neighborhood."

Before attempting any type of conditioning or fitness program, it is important that we understand how the body functions and will respond to various demands that are placed on it. We should understand the fundamental principles of exercise and training, and know what the individual can do without harm.

The concept of physical fitness embraces so many elements that to identify each would be a difficult, if not impossible, task. Basically, physical fitness refers to a certain efficiency of body functions. Training can improve this efficiency.

Many misconceptions exist as to the definition of physical fitness. Any youngster can put it in simple words such as "strong, fast, or wind" and be remarkably accurate. Fitness may be called physical fitness, organic fitness, or physiological fitness. Too often, physical fitness is considered synonomous with strength. A strong person may tire easily, have high blood pressure, and be incapable of doing work for a prolonged period of time. Broad shoulders, narrow hips, and a lack of external fat may be desirable; however, this is not necessarily an indication of physical fitness.

The components of physical fitness are generally agreed to be (1) muscular strength, (2) muscular endurance, (3) cardio-vascular endurance, (4) flexibility, (5) balance, (6) coordination, (7) speed, (8) agility, and (9) power.

The physical fitness of an individual is the result of the adaptations the body has made to various specific demands. These adaptations are not permanent. Unlike most man-made machines, the more a human does, the more he will be capable of doing, and the less he does, the less he will be capable of doing.[3]

With this concept as a guide, three main principles must be applied in order to develop an effective exercise program: (1) overload, (2) progression, and (3) regularity.[4]

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[3] Sorani, Robert. *Circuit Training*. Dubuque, Iowa: William C. Brown Company, 1966, p. 16.

[4] Ibid., p. 17.

Brouha[5] summarized the changes produced by physical fitness training as follows:

1. Increased strength of the muscles and improved neuromuscular coordination.
2. Greater mechanical efficiency as measured in terms of lower oxygen consumption for a given amount of work.
3. Greater maximum oxygen consumption.
4. A higher maximum cardiac output with less increase in pulse rate and blood pressure during sub-maximal exercise.
5. More economical ventilation during exertion, and a greater maximum pulmonary ventilation.
6. Lower concentration of lactic acid for a given amount of exercise, and the ability to tolerate a higher concentration of lactic acid before exhaustion.
7. Quicker recovery in pulse rate and blood pressure after submaximal exercise.
8. Better heat dissipation during submaximal exertion.

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[5] Brouha, Lucien. *Training In Science and Medicine of Exercise and Sports.* New York: Harper and Row, 1960, p. 403.

Chapter VI

Conditioning and Preparatory Exercises

Conditioning and preparatory exercises have a valid place in the modern physical education program. A well-planned exercise program should be a vital part of each physical education class.

The circuit training method can be used for a variety of exercises. Each exercise has a specified number of repetitions. The student completes the circuit with the number of repetitions until he has performed at each station.

Objectives

1. Counteract postural faults.
2. Warm up.
3. Strengthen and condition.
4. Improve muscle tone.
5. Maintain normal joint action.
6. Develop coordination.
7. Supply exercise appropriate for the individual's own personal condition.

Selection of Exercises

The teacher must consider certain factors in selecting the exercises which are appropriate for the needs of his students.

1. The areas of the body to be included are the arms, legs, shoulders, hips, neck, and the lateral, anterior, and posterior trunk.
3. Begin with simple exercises and progress to complex vigorous exercises.

3. Conditioning exercises should be well-planned and varied.
4. For improvement, utilize a form of overload: (a) increase work rate (speed or cadence); (b) increase work load (repetition); and (c) combine increased work rate and work load.

Combatives

Combatives or antagonistic activities are of a vigorous and challenging nature and are especially popular with boys, although they may be engaged in by both sexes and all ages. Combatives consist of a contest between two individuals in which one attempts to do something to the other (push, pull, lift, upset, etc.) and the other attempts to prevent the first from doing it. It develops the qualities of self-confidence, aggressiveness, individual initiative, and virility.

Teaching Suggestion

1. To introduce a contest, name it, put the class in formation, explain it, demonstrate it and ask for questions. Start action immediately after clarifying problems arising from questions.
2. Partners should be approximately equal in size and weight.
3. Organize class in groups of double line formation, with the the two lines facing each other at a distance of 6 to 8 feet.

One's	←→	Two's	One's	←→	Two's
x		o	x		o
x		o	x		o
x		o	x		o
x		o	x		o
x		o	x		o

If more than one group is used, all groups face the instructor until name of combative, explanation, and demonstration are given.

4. Designate the lines as "one's and two's." Instructor should be centrally located so he can see all groups and they can see him.
5. Direct "one's" to be aggressors and "two's" to resist. Later reverse this procedure.

6. When participants assume the proper position, give commands "ready" and then "start".
7. Pause, and give commands "change", "ready", and "start".
8. No contest should be continued for more than a few minutes at a time.
9. After the "two's" have engaged in activity as aggressors an equal length of time, call "halt" and introduce new contests.

These combatives have proved successful in junior and senior high school.

Rooster Fight
Indian Wrestle
Horse and Rider
Right (Left) Arm Pull
Referee's Hold Pull
Hand Wrestle

Rope Jumping

Rope jumping has a place in well-planned physical education programs. It can be used successfully in programs for all grade levels for boys and girls.

Although rope jumping may be considered as an easy exercise for young children, it can be developed into a difficult activity of many patterns and requiring a great deal of skill. It lends itself to physical education demonstrations and play days. Rope jumping requires very little equipment.

Coordinated with music, rope jumping can well be accepted as a part of a rhythms unit. It can be used to aid in developing foot and leg muscles for basketball players and track men.

Fundamental Skills

1. *Small Single Rope Jumping*

This is the most elementary form of rope jumping, but certain forms of it require a great deal of skill. When using the small single rope, the jumper may jump by himself or with a partner. Single rope jumping includes standing in place, jumping on both feet, or alternate feet, turning the rope forward, backward, and running and skipping. A more advanced form includes turning the rope with the arms to the side, alternating with crossing arms in front of the body as rope is turned. Partners may stand side-by-side, each turning one end of the rope, or they may stand one behind the other, with one of them turning the rope alone.

2. *One Large Rope*

This is a little more advanced and can be used when there is a large group but a limited supply of jump ropes. Many variations can be used. Individual jumping includes jumping when the rope is turned toward the jumper, away from the jumper, running in front, jumping, and running out the back, jumping "high water," (turning the rope so that it doesn't hit the ground), jumping and turning around at the same time, and increasing the speed with which the rope is turned. Large groups may participate by having a leader who goes through the various jumps while the others follow in single file. If a jumper misses, he is eliminated. Mass jumping in which all the jumpers enter the rope at once may also be done. Here again, when the jumper misses, he is eliminated.

3. *Two Large Ropes*

This is very advanced and requires great skill on the part of the rope turners as well as the jumper. Two ropes are turned at the same time either inward toward each other ("Double Dodge") or outward away from each other ("French Rope"). The jumper has to jump twice as fast when two ropes are used and the entry is much more difficult. All the feats described above can also be done when two large ropes are used. It will be quite a challenge to the less skilled students to learn to turn double dodge and French rope.

4. *Large Single Rope and Small Individual Rope*

Here again a great deal of skill and good timing is required. While a large rope is being turned, a player turns and skips his own rope. This can be done individually, with partners or with 3 or 4 people.

5. *Rope Jumping to Music*

This offers variety, provides an opportunity for creativity, and is great fun. By listening to the music and making up a series of feats, the jumper not only develops rhythm and timing, but is also given a chance to be creative. This is very successful as an individual or a group project. The emphasis can be placed on several different things at different times—the floor pattern, the foot pattern, or skipping in time to the music.

Skill Tests

1. *Rope skipping—one hundred skips*

This event requires a stop watch for timing. The jumper completes the skips in the shortest time possible. On the start the rope is held behind and touching the legs.

2. *Rope skipping—thirty seconds*

The player is given 30 seconds to skip or jump the rope, and his skips or jumps are counted. Any skips described earlier may be used.

3. *Jump While in Squatting Position*

This event requires a stop watch for timing. The player completes as many squatting jumps as possible in 15 seconds.

4. *Jump Twice While Rope is Revolving Once*

Player jumps as many times as possible without having to check the rope, jumping twice at each turn.

Weight Training

Weight training was introduced as an orthopedic measure to assist in rehabilitation of World War II injuries, especially knee injuries. The activity is rapidly gaining as an important unit of instruction because of its carry-over value.

Fundamentals Skills

There are several exercises used in the science of weight training. Basic skills are listed; however, instructors are encouraged to select references for teaching a unit in weight training.

1. Deep knee bend
2. Curl
3. Pullover
4. Bench press
5. Dead lift
6. Side bend
7. Rowing motion

Definitions of Terms

Weight Training: Employment of barbells, dumbbells, pulley weights, and similar apparatus as a method of conditioning to improve performance in selected skills.

Weight Lifting: A sport in which the individual trains for the purpose of lifting maximum loads. The barbell is the primary item of equipment employed in competitive lifting.

Resistance Exercise: This encompasses both the preceding terms and also includes all exercises in which the muscle is overloaded.[1]

Wrestling

The sport of wrestling dates back to the days of ancient Greece. As a recreational sport, wrestling was very popular with the early pioneers in the United States.

Yale and the University of Pennsylvania started wrestling as an intercollegiate sport in 1900. In 1919 it became a sport on the interscholastic level.[2]

The free style, catch-as-catch-can type of wrestling used by the colleges and high schools should not be confused with the professional wrestling seen on television. The two differ so greatly that they might be called two different sports.

Wrestling is a contact sport for boys that develops fitness, strength, agility, and self-confidence. Every participant has a chance to learn the various moves, holds and positions and an opportunity to practice these skills with a partner matched according to weight. The objective is to place the opponent's shoulder blades against the mat for two full seconds.

Fundamental Skills

1. Wrestling Positions
2. Takedown Skills and Counters
3. Breakdown Skills and Counters
4. Reverses and Escapes and Counters
5. Pinning Combinations and Come-Outs

Wrestlers may use any legal grip or hold but they cannot use the following: slamming an opponent to the mat before placing one of own knees on the mat; any hold that is used for punishment alone; holds over the nose, eyes or mouth; kicking; biting; striking; butting; strangling or anything that may endanger an opponent; bending the fingers to break holds; hammer lock above the right angle or twisting hammer lock; toe holds; over scissors; full nelson; interlocking of arms or hands around leg or waist while opponent has both knees on the mat.[3]

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[1] American Association for Health, Physical Education and Recreation. *Weight Training in Sports and Physical Education.* Washington, D. C.: 1962, p. 36.

[2] Hase, Gerald J. and Irwin Rosentein. *Modern Physical Education.* New York: Holt, Rinehart and Winston, Inc., 1966, p. 242.

High school wrestling matches are six minutes in length unless ended earlier by a fall. The first period of two minutes starts with both wrestlers in a standing position. The second period and the third period are also two minutes in length and start from the referee's position on the mat. In the referee's position, the defensive man is down on his hands and knees in the center of the mat. The offensive man is also on his knees facing in the same direction with his nearest arm loosely around the opponent's waist and the other arm at the bend of the opponent's elbow or just above it.

To determine the top and bottom positions for the second period, the referee tosses a coin. Positions are reversed for the third period. The referee's position is also used when wrestlers move outside the wrestling area. The wrestler that had the advantage when they left the wrestling area is the top man when they return to the mat. If neither wrestler had the advantage, the standing position is used.[4]

Each wrestler attempts to score a fall over his opponent and by so doing scores five team points for the match. Points also may be earned in a bout by three other methods: a draw, which scores two points for each contestant; a forfeit, which scores five team points; and a decision, which scores three team points for the winning contestant.[5]

Points for the decision are used only when a fall does not occur and are scored as follows:

Near Fall	3 points
Predicament	2 points
Takedown	2 points
Reverse	2 points
Escape	1 point
Riding Time	1 point for each minute advantage over opponent. Maximum of 2 points.

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[3] American Association for Health, Physical Education, and Recreation. *Physical Education for High Scholl Students.* 1201 Sixteenth St., N. W. Washington, D. C.: 1966, p. 308.

[4] Ibid., p. 308.

[5] Hase. op. cit., p. 244.

The weight classifications for high school wrestling are as follows:

* 95 and under
96 to 103
104 to 112
113 to 120
121 to 127
128 to 133
134 to 138
139 to 145
146 to 154
155 to 165
*166 to 175
*176 to 191
Heavyweight

*These three weight classifications are recommended by the NCAA Committee for high school but are not official weights unless adopted by the State High School League. Generally they are adopted because they provide more opportunities for boys to compete on an equal weight basis.

Equipment and Facilities

It is possible to conduct wrestling with students using their personal equipment. Knee guards and ear guards are optional pieces of equipment. Mats should be at least 20 by 20 feet, encased in a mat cover that can be kept clean to prevent infection. An official wrestling mat is 24 by 24 feet square with a circle 10 feet in diameter painted in the center. In the center of this circle is an arrow at least 12 inches long which indicates the position and direction the wrestlers are to face in starting a match. Supplementary mats 5 feet in width should completely surround the larger mat.

A scale will be necessary to weigh the class members for proper placement in weight divisions. A timer should be used to determine the length of drills and scrimmages.

Class Management

To teach techniques of wrestling, the instructor should line up his class according to weight and size. Partner assignments could remain permanent through the course.

By proper organization 10 pairs of wrestlers can be instructed on a hold on a 20 foot square mat. Only four pairs should be allowed to scrimmage on a mat at one time, and then only if they are working down on the mat.

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[6] *Official Wrestling Guide* (annual). National Collegiate Athletic Association, New York.

Teaching Suggestions

Since wrestling is a highly individualized sport, it often requires different approaches and techniques of teaching than those used in other sports. The following suggestions will aid in making the teaching of wrestling easier, more enjoyable and successful:

1. The participants should be in good physical condition. Conditioning for this class can be achieved through a few minutes of fast furious exercises followed by games or/and drills to further conditioning.
2. Teaching too many holds and moves in one lesson should be avoided.
3. Execution of the holds and movements should be learned well before attempting new ones.
4. Discourage any wrestling that does not use holds and movements learned in class.
5. Everyone should be doing something all the time.
6. All boys should have experience officiating matches.

Safety Precautions

The welfare of the participants in this program requires that all safety measures should be carefully checked.

1. Clean the mat daily.
2. Pad all obstructions.
3. If a wall is located near or next to the mat area, have 5 foot wall mats covering this area.
4. Students should remove rings and keep nails trimmed.
5. Wrestler must stop when opponent is going off mat.
6. It is recommended that junior high students use the referee's hold or start from all fours in lieu of the standing position.

Evaluation

Wrestling skill must be measured subjectively because it is impossible to isolate the quality of an individual's performance from that of his opponent in a wrestling skill test. The subjective rating should be based on the individual's wrestling attitude, aggressiveness, and ability to demonstrate an effective knowledge and use of the following:

1. Wrestling positions
2. Takedowns and counters
3. Breakdowns and counters
4. Reverses, escapes and counters
5. Pins and come-outs

Chapter
VII

Team Sports

In team sports, boys and girls perform such fundamental movements as running, jumping, striking, kicking, throwing, and catching. These movements develop skills that may be used in more highly organized games and during leisure, now and in later life. The learning of skills stimulates a desire for competition.

In planning program content, the teacher of physical education must determine the importance of team sports in relation to other activities as an effective means of achieving educational ends. Instruction in team sports should occupy an important position in any good physical education program.

Lead-up games have great value in developing skills in several sports. They should be designed for instruction and fun.

Objectives:

1. Give students an opportunity to learn skills in team sports for leisure time.
2. Help students develop an understanding and appreciation for team games.
3. Encourage boys and girls to become interested in working toward membership on an intramural or varsity team.
4. Assist students to mature and achieve personal satisfaction in team activities.

Basketball

This sport is thoroughly covered in several textbooks. Instructors are encouraged to include references in their professional library for a more detailed description of skills and game precedure.

Fundamental Skills[1]

BOY'S BASKETBALL (Elementary)	GIRLS' BASKETBALL (Elementary)
Catching ball	Catching Ball
Push pass	Chest pass
Two hand underhand pass	Underhand pass
Push or chest shot	Bounce pass
Dribbling	Overhead pass
Underhand loop shot	Chest shot
Free throw shot	Underhand shot
Individual guarding	Guarding
Team offense	Dribbling
Team defense	Pivoting

BOYS' BASKETBALL (Advanced)	GIRLS' BASKETBALL (Advanced)
Review of fundamentals	Reveiew elem. fundamentals
Pivoting	Receiving ball
Hook pass	Passing
Bounce pass	Field shooting
Screening	Foul shooting
Man for man defense	Feint or dodge
Fast breaking offense	Juggle
Zone defense	Offensive team play
Slow breaking offense	Defensive team play
Team plays	Training

Teaching Suggestions

1. Emphasis should be on learning skills by drills rather than playing actual games.
2. Skill instruction should be available on different levels.

Lead-Up Games[2]

1. Additive Basketball
2. Corner Ball
3. Crate Basketball
4. Side-Line Basketball
5. Simplified Basketball

Field Hockey

The game is played by two teams of 11 players each, designated as five forwards, three halfbacks, and a goalkeeper. The object of the game is to hit the ball legally with the hockey stick to drive it through the opponent's goal.

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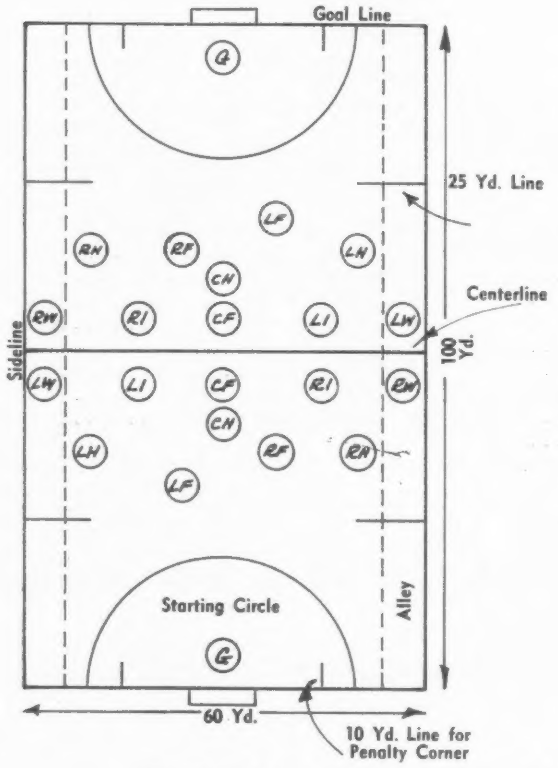
[1] LaPorte, William Ralph. *The Physical Education Curriculum.* University of Southern California Press, Los Angeles: 1955, p. 21.

[2] AAHPER, *How We Do It Game Book.* 1201 Sixteenth Street, N. W., Washington, D. C.: 20036, 1964, pp. 23-81.

Goals count one point and can be scored only if an attacker's stick touches the ball inside the sticking circle. The official game is played in two periods of 30 minutes each; however, it may be shortened. There is no time-out allowed except for injury or replacement of a broken stick. Official rules are printed in the D.G.W.S. Field Hockey — LaCrosse Guide.



LW	Left Wing
LI	Left Inner
CF	Center Forward
RI	Right Inner
RW	Right Wing
LH	Left Halfback
CH	Center Halfback
RH	Right Halfback
LF	Left Fullback
RF	Right Fullback
G	Goalie

Field and line-up of players for start of a game

Terminology

Alley. Area of the field between the sideline and the five yard or alley line.

Flick. A wrist stroke having no back swing. Ball rises slightly. Good for close shooting or passing to a marked player, it is usually considered an advanced technique.

Reverse sticks. Turning the stick over to play a ball on the left, or to tackle a player on the right.

Stick side. The player's right side, so-called because the stick meets the ball on that side of the body.

Marking. Marking applies to the backs of the team on the defense. Each back normally responsible for a definite forward line player on the opposite team. The term "marking" means staying close enough to a forward to intercept a pass to him.

Striking Circle. The shooting area in front of each goal.

Triangular Pass. Short, diagonal passes made back and forth between two players.

Teaching Progressions

The stick—selection and carrying.

Fielding the ball—stick-stop and hand-stop.

Moving the ball—dribble, push pass, drive, scoop and flick.

Tackling—straight tackle, left-hand lunge, circular tackle, and job or jab.

Putting ball in play—bully, roll-in, and corner and penalty corners.

Goalkeeping—elementary and advanced.

Penalty—corners and penalty bully.

Team tactics—defense and offense from bully, defense and offense from corner, defense and offense from roll-in, dodging, marking and covering, interchange and position play.

Hall Ball

An activity for girls, hall ball is played in the fall. The game is believed to have started at Women's College, University of North Carolina, Greensboro, a few years ago. There was a need for an activity for girls similar to touch football.

Fundamental Skills

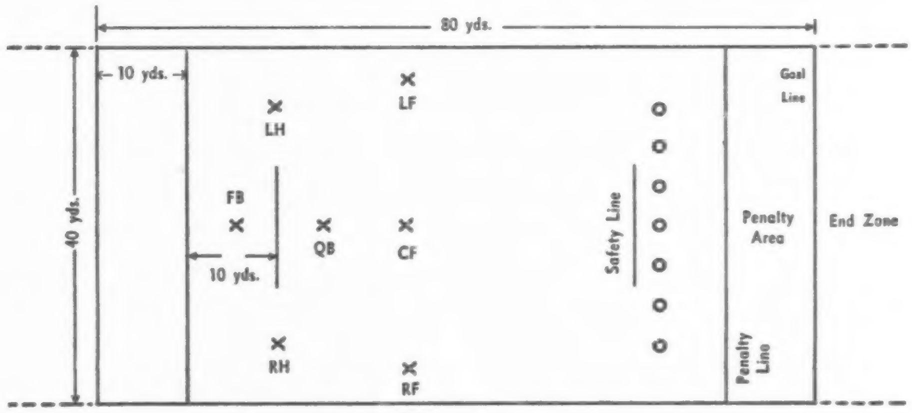
It is essential that a good part of the class period time be given to developing fundamental skills. Students should learn and practice such fundamentals as receiving the ball and passing the ball. They will need to learn the proper methods of holding the ball, throwing the ball for accuracy, and throwing passes laterally and backward.

53C

Game Description

This game uses a two-platoon system. When a team has possession of the ball, the offensive platoon is in action; otherwise the defensive squad is on the field. There are 7 players on each platoon—3 forwards and 4 backs. All players are eligible to pass or receive.

The game is started with a pass off. This also occurs at the beginning of the second half and after a touchdown. If the pass off is caught, one forward pass is allowed before downs are counted. This is also true when an interception occurs.



Hall Ball Field and Player Positions

1. A team has 4 downs in which to score. If they fail or there is an interception, the opposing team takes over.

2. The player with the ball may run laterally or back, but not forward. Unlimited backward and lateral passes are permitted. Hand-offs are legal. One step in any direction is allowed when throwing a forward pass.

3. The ball is advanced by means of one forward pass per down. Screening or blocking is illegal. Players may guard as in basketball.

4. A touchdown (6 points) is scored if a pass started from outside the penalty area is completed into the opponent's end zone. After a touchdown a target is set up on the goal line. Any member of the scoring team may attempt the throw for an extra point. This is an unguarded throw from the safety line and if successful, counts one point.

5. A safety (2 points) is scored if the offensive team is downed

behind its own goal line. After a safety, the offensive team may choose to keep possession of the ball and start play with a first down at the safety line or they may elect to pass-off.

Rules and Regulations

1. No personal contact is allowed. If the foul is committed by the offense, they lose possession of the ball; if the defense, the play reverts to a first down for the offense.

2. Any violation of the rules not involving out of bounds or personal contact is a technical foul. If a technical foul, such as running forward with the ball, is committed by the offense, the penalty is loss of down. If a technical foul, such as offside, is committed by the defense, the offense has the choice of continuing play or repeating the down.

3. If a double foul occurs (opponents foul each other), the down is repeated and the ball is put into play at the line of scrimmage.

4. In addition to running forward with the ball and offsides, technical fouls include screening and blocking without personal contact, holding the ball in a stationary position for longer than 5 seconds, holding the ball while moving for longer than 10 seconds, taking more than 5 seconds in the huddle, and consuming more than 15 seconds in changing platoons.

5. Names of all players according to platoons are handed the scorer at the beginning of the game. Substitutions may be made at any time during change of platoons without reporting to scorers. At half-time players may change platoons, but this must be reported. A player must remain on the designated platoon (offensive or defensive) for an entire half. Breach of the substitution is a technical foul.

6. There are five officials: scorer, timer, downskeeper who marks the line of scrimmage, and two referees who call all fouls and mark the spot where each down shall start.

7. The referee's whistle shall signal the start of each down. The ball must be centered within 5 seconds of this whistle.

8. Time-out may not be taken during the game unless called by the official for such things as injury or rule interpretation. Time-out is automatic after a touchdown or a safety. Time-in is taken upon signal by the referee.

9. Tie balls shall be awarded to the team passing the ball.

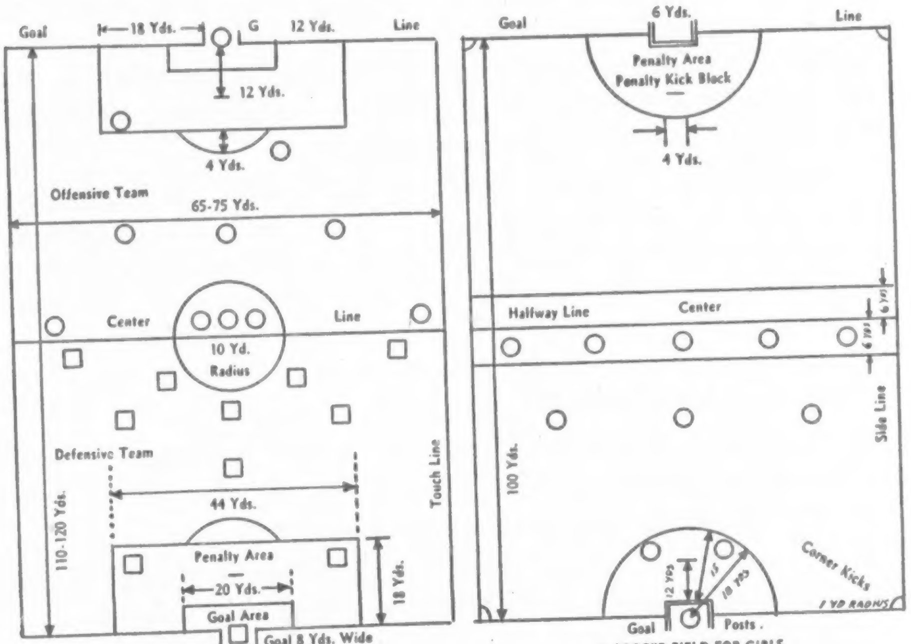
10. A pass received out-of-bounds shall be considered incomplete. Should a player with the ball step out-of-bounds, the ball shall be put in play opposite the spot where the violation occurred.

11. When a pass is intercepted in the end zone, the ball shall be put into play at the safety line by the team intercepting.

12. When a team uses the continuous pass rule, each forward pass, whether or not it is successful, utilizes a down. This means that a team may put the ball in play with a pass back from the center forward, and then by means of successful forward passes, either score a touchdown or use up all its down without play being stopped. If a receiver of a successful pass makes any attempt to continue the ball in play, a down shall be counted. On interceptions the first pass following the interception does not count as a down.

Soccer

Soccer is played officially, with eleven players on a team, lined up as five forwards, three halfbacks, two fullbacks, and a goalie.



A. SOCCER FIELD FOR BOYS

B. SOCCER FIELD FOR GIRLS

Soccer Fields with Players Positions: A, boys; B, girls
(Soccer field diagram reprinted by permission from *Physical Education for High School Students.* American Association for Health, Physical Education and Recreation. Washington, D. C. 1201 Sixteenth St. N. W., 1966.

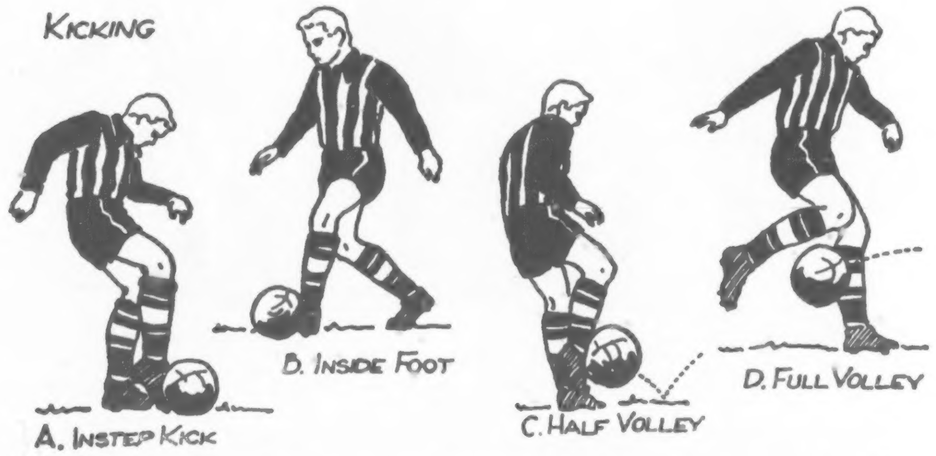
The game is started with a kick-off at the center of the play area. The ball continues in play until a goal has been scored. After a goal is scored, the team that did not score kicks off from the center.

Since soccer provides many new skills, it is essential that beginners spend a great deal of time in fundamental skills drills. Seventh and eighth grade pupils should participate in various types of lead-up games to soccer.

Fundamental Skills

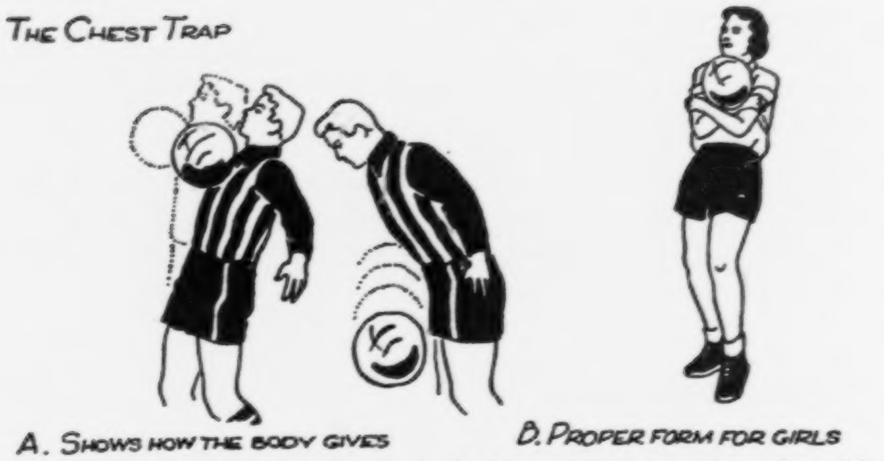
The following skills are presented in the order of difficulty:

1. *Kicking* is used to advance the ball forward or to pass to a teammate.

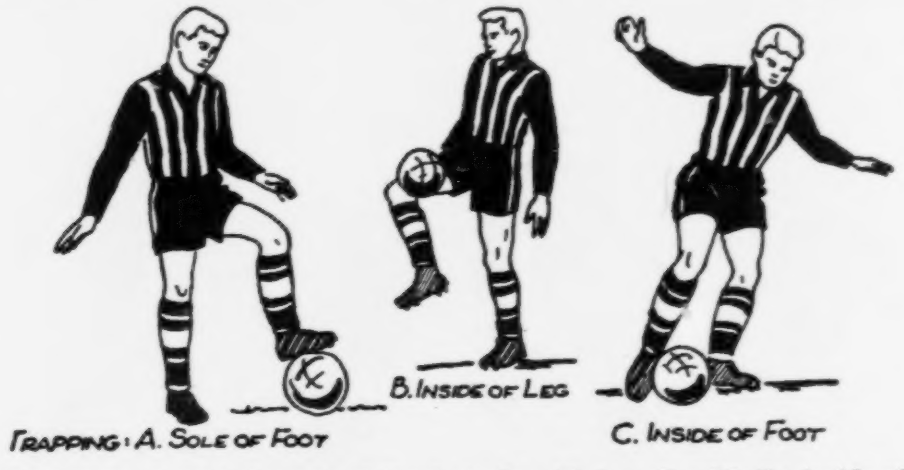


Kicking: A, in-step kick; B, inside-foot; C, half volley; D, full volley (From AAHPER, *Physical Education for High School Students.* Washington: 1201 Sixteenth St., N. W., 1966 By Permission.)

2. *Trapping* is used to stop the ball with the foot, leg, or chest. The ball may be trapped with the sole of the foot, the inside of the lower leg, the front of both legs, between the ankles, and with the chest. Trapping with the sole of foot and inside of the lower leg are the surest methods of trapping. For all methods of trapping, the player should keep his eye on the oncoming ball. Spread arms wide for balance. Knee of supporting leg should be well-bent as ball is met. Meet ball slightly in front of body. Bend knee of trapping leg and bring foot or inside of leg down over the ball. Recover position quickly in order to pass.


THE CHEST TRAP
A. SHOWS HOW THE BODY GIVES
B. PROPER FORM FOR GIRLS

The Chest Trap: A shows how the body gives; B, proper form for girls



Trapping: A, with the sole of the foot; B, with leg; C, with the inside of the foot

(From AAHPER, *Physical Fducation for High School Students.* Washington: 1201 Sixteenth St., N. W., 1966 By Permission.)

3. *Dribbling* is used to propel the ball while running. For dribbling straight ahead, keep the ball 10-12 inches in front of the body. Rotate the leg slightly outward, tapping the ball lightly with the inside of the foot. Use both feet alternately. Keep the eyes on the ball most of the time. Look up for direction before passing.

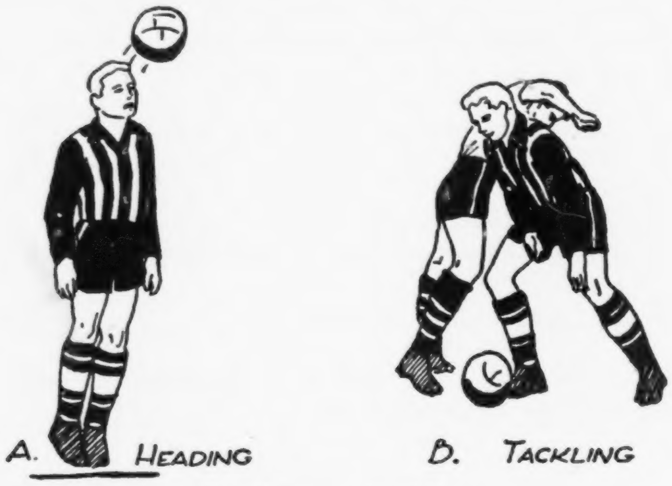
4. *Volleying* is playing the ball before it hits the ground.

5. *Tackling* is taking the ball away from an opponent.
   a. Forward tackle. The leg is thrust forward to push the ball away from an oncoming opponent.
   b. Side tackle. The leg is thrust sideward to tap the ball

away from an opponent dribbling alongside the player.

c. Hook tackle. The foot is thrust to the side and hooked around the ball to pull it away from an opponent who has trapped the ball or is dribbling with it.

6. *Heading* is a skill used in playing the ball with the head.



Heading and Tackling
(From AAHPER, *Physical Education for High School Students.* Washington: 1201 Sixteenth St., N. W. 1966 By Permission.)

Terminology

Corner-kick. Awarded the attacking team when the ball passes over the goal line except between the goal posts and is last touched by a defender.

Free-kick. Awarded the offended team for fouls occurring outside the penalty area and taken at the spot of the foul.

Goal kick. Given a defensive team if the ball goes over the goal line other than between the goal posts and is last touched by an offensive player.

Throw-in. Putting the ball in play after the ball goes out-of-bounds on the sideline with a two-hand overhead throw.

Passing. Kicking the ball to a teammate.

Penalty kick. Awarded the offended team at the penalty kick mark if the defensive player fouls in his own penalty area.

Roll-in (girls). Putting the ball in play after a foul by both teams.

Dropped ball (boys). Putting the ball in play after a foul by both teams.

Skill Tests

1. *Place Kick for Goal*

Equipment: Regulation soccer ball, soccer goals.

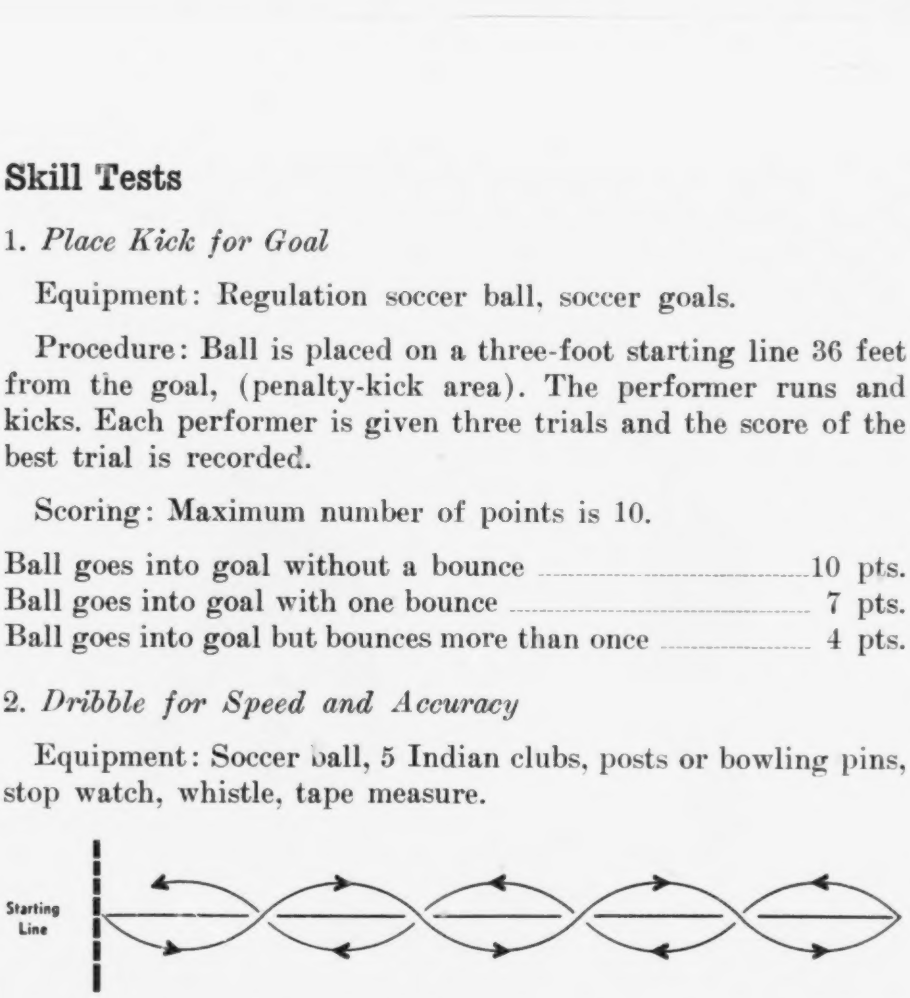
Procedure: Ball is placed on a three-foot starting line 36 feet from the goal, (penalty-kick area). The performer runs and kicks. Each performer is given three trials and the score of the best trial is recorded.

Scoring: Maximum number of points is 10.

Ball goes into goal without a bounce	10 pts.
Ball goes into goal with one bounce	7 pts.
Ball goes into goal but bounces more than once	4 pts.

2. *Dribble for Speed and Accuracy*

Equipment: Soccer ball, 5 Indian clubs, posts or bowling pins, stop watch, whistle, tape measure.



Time: 30 seconds. Whistle is blown to start and at the end of 30 seconds.

Procedure: Ball is placed on the starting line. Clubs are placed five feet apart, starting at beginning point. At starting whistle the performer dribbles to the right of the first club, to the left of the second, and continues to weave between the clubs, going and coming. At the end of 30 seconds, whistle is blown and performer stops wherever he is.

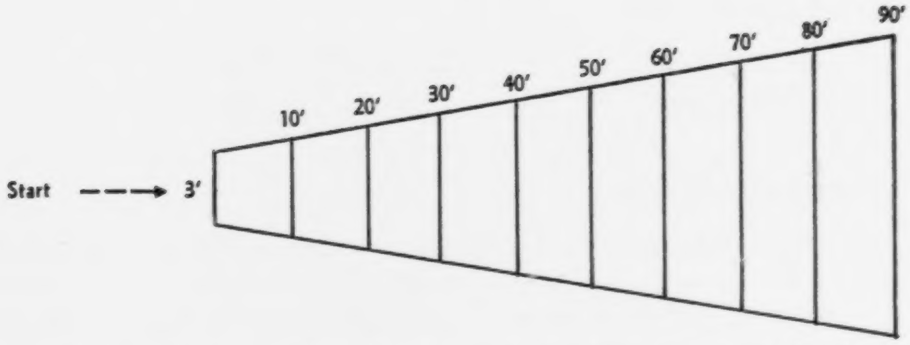
Scoring: Maximum number of points is 10. Performer gets one point for each club he passes, going and coming, making a total of 10 if he crosses the finish (starting) line.

3. *Punt for Distance*

Equipment: Soccer balls and measuring tape. Lime and marker.

Set Up: See above figure. Starting line is 3 feet long.

Procedure: Ball is held in performer's hand behind starting line. Performer takes three steps to start line and punts. Each



performer is given three trials, and the best score of the three is recorded.

Scoring: Maximum number of points is 10:

Ball kicked 90 ft.	10 pts.
Ball kicked 80 ft.	9 pts.
Ball kicked, etc.	
Ball kicked less than 10 ft.	1 pt.

Soccer Lead-Up Games[3]

1. Two Ball Soccer
2. Stationary Kickball
3. Zone Soccer
4. Soccer Cage Ball
5. Gator Ball
6. Line Soccer

Softball

The game of softball was adapted from our national game of baseball by playground leaders and physical education instructors for indoor and playground use. A larger and softer ball was used, and the dimensions of the diamond were reduced.

Fundamental Skills[4]

SOFTBALL OR BASEBALL (Elementary)	SOFTBALL OR BASEBALL (Advanced)
Throwing overhead	Review elementary fundamentals
Fielding flies	Infield play
Throwing underhand	Playing the bases
Fielding ground balls	Outfield play
Batting	Advanced pitching
Catching	Bunting
Base running	Base stealing
Pitching	Team offense
Sliding	Sliding
	Team defense

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[3] AAHPER, *How We Do It Game Book.*
[4] LaPorte, op. cit., p. 21.

Lead-Up Games[5]

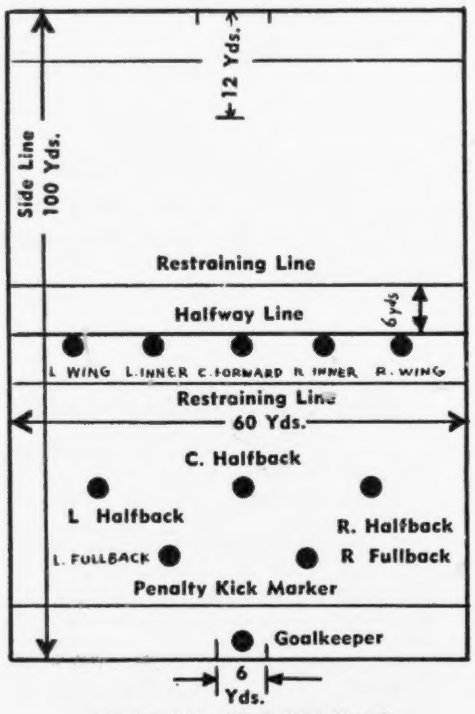
1. Tee Softball	3. Six-base Softball
2. Victory Ball	4. One-swing Softball

Additional Game

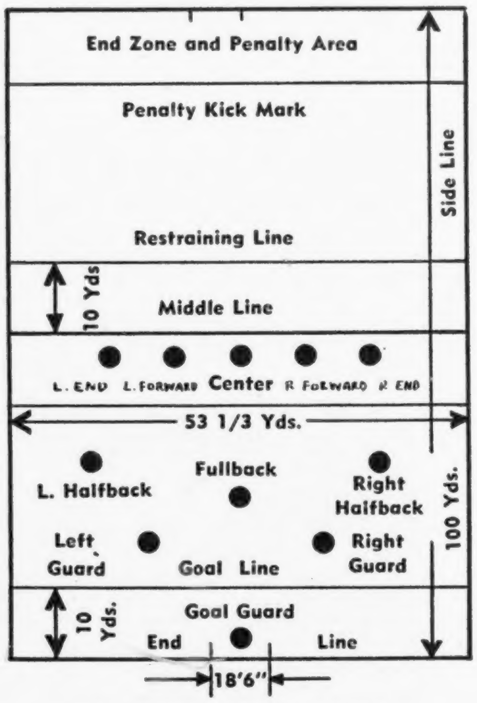
1. One-Pitch Softball. This is a game played with softball rules with these exceptions: batting team furnishes their own pitcher, batter is permitted one pitch, and a foul or missed ball constitutes an out.

Speedball

The game of speedball can be played on an outdoor area comparable in size to the touch-football or soccer field. The regulation speedball is a little larger than a soccer ball, but many schools use the soccer ball. The ball is put into play by a kick-off at the center of the field. It may be advanced down the field by dribbling with the feet, or passing from player to player as in basketball, after it has been lifted into the air by the feet or by punting.



SPEEDBALL FIELD FOR GIRLS



SPEEDBALL FIELD FOR BOYS

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[5] AAHPER, op. cit., pp. 221-269.

Once the ball hits the ground, it must be touched with the foot before it can be passed with the hands.

Men's classes should refer to the official Speedball Guide and women's classes should refer to the D.G.W.S. Soccer-Speedball Guide for complete instructions.

Fundamental Skills

Soccer-related skills. All soccer skills may be used in Speedball. (See analysis of soccer skills.)

Basketball-related skills. All basketball skills except those involving goal shooting and dribbling may be used in speedball.

Skills peculiar to speedball. These skills concern means of converting ground balls into aerial balls.

1. *Lifting the ball to a teammate.* Face oncoming ball squarely. If ball is stationary, face direction it is to go. Place weight on left foot, bend knee slightly. Spread arms wide for balance and keep eyes on the ball. Stand so that ball will be slightly in front of body and to right. Bend right knee and place right toe under ball. Lift with extension of right knee; do not kick ball. Right foot follows through in direction ball is to go.

2. *Lifting, rolling, or bounding ball to self.* Meet oncoming ball squarely. Keep eyes on ball. Spread arms out for balance. Place weight on left foot, bend left knee. Meet ball about 18 inches in front of body. Place right toe under ball and bend hip, knee, and ankle sharply to hook ball up to body. Bend body forward to grasp ball with hands as it leaves the foot. It must leave the foot before being touched by the hands.

3. *Lifting stationary ball to self with both feet.* Place feet on each side of ball. Put weight on outside of both feet, with knees

SPEEDBALL (Elementary)	SPEEDBALL (Advanced)
Kicking	Review elem. fundamentals .
Dribbling	Heading ....
Positions	Offense strategy ....
Passing	Knocking-on ....
Catching	Defense strategy ....
Kicking-up	Offense turn plays ....
Stubbing	Defense turn plays ....
Guarding	Special plays ....
Pivoting	Training tactics ....
Trapping	Leadership and officiating ..

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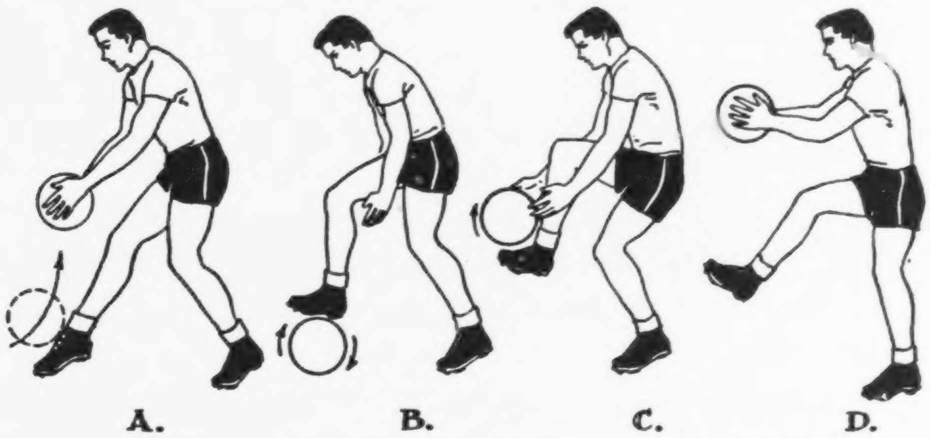
[6] LaPorte, op. cit., p. 20.

slightly bent. Bend body forward. Keep arms away from body, with elbows bent. Keep eyes on ball. Turn toes together and make short, quick jump into air, bending knees outward and lifting ball with feet. Grasp ball with hands.



(From AAHPER, Physical Education for High School Students. Washton: 1201 Sixteenth St., N. W., 1966. By Permission.)

Skills Practice

For practice of soccer skills, kicking, passing, trapping, blocking with the body, etc., refer to formations in soccer section.

1. *For practice in converting ground ball to aerial ball:*
   - a. Use shuttle relay formation, with passes to teammates.

     9 7 5 3 1 ↔ 2 4 6 8 10
   - b. No. 1 punts the ball to No. 2 and goes to end of own line, No. 2 catches the ball and returns punt to No. 3, etc.
   - c. Repeat above drill, using drop-kick instead of punt.
   - d. No. 1 dribbles ball a few feet and kicks it up to No. 2 who catches it, places it on the ground, dribbles, and kicks it up to No. 3, etc.
   - e. No. 1 lifts ball to self with both feet, catches it, and throws it to No. 2 who catches it, places it on ground, lifts to self, and throws to No. 3, etc.
   - f. Repeat above, using lift to self with one foot before throwing to teammate.

2. *For practice of skills related to scoring:*
   - a. Drop-kick. Practice drop-kicks in column formation from any position between penalty-kick mark and five-yard line.

Ball must go over the crossbar and between the goal posts. Keep individual score—3 points for each time the ball goes over the bar.

b. Touchdown: Have as many teams as there are balls, in two lines behind the 5 yd. line facing the end line. (See figure below)

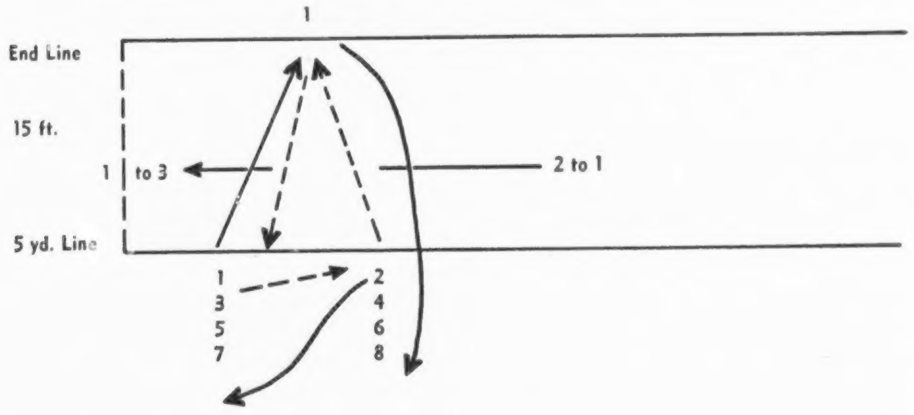
(1) No. 1 throws the ball to No. 2, then runs across end line into end zone to receive 2's pass back to him.

(2) No. 2 throws to No. 1 across end line and goes to end of odds' line.

(3) No. 1 throws ball back to No. 3 who has moved up to the 5 yd. line. No. 1 then returns to end of evens' line.

(4) No. 3 throws to No. 4 who has moved into 2's position, crosses end line, etc.

(5) Continue until all players have had the opportunity of receiving the ball in the end zone.



Scoring

1. A field goal occurs when a ground ball goes between goal post and under the cross bar—one point (boys); two points (girls).
2. Scoring by a drop kick occurs when the ball goes over the cross bar—three points.
3. A touchdown occurs when an offensive player completes a pass to his teammate over the end line—one point (boys); two points (girls).
4. One point is scored with a penalty kick if the ball passes

under the cross bar and between the goal posts.

5. An end kick occurs when a ground ball has been kicked over the end line from the end zone—one point.

Touch or Flag Football

American football has had tremendous popularity since its beginning in 1869. It is quite natural that an adaptation of regular football be developed for the vast number of people who could not play regular football because of lack of equipment and other factors.

Touch or flag football provides a highly-organized team game which involves many skills and strategies of regular football but does not require the expensive equipment nor include the dangers involved in regular football.

This is an excellent activity to be included in the fall season physical education program for boys. By using modified rules and game situations, the game becomes adaptable to practically any group.

Fundamental Skills[7]

TOUCH FOOTBALL (Elementary)	TOUCH FOOTBALL (Advanced)
Passing	Review elem. fundamentals
Stance and positions	Passing forward
Catching	Pass receiving
Running with ball	Passing backward-lateral
Blocking	Catching kicked ball
Kicking	Center pass (spiral-end over end)
Dodging and side step	Body block
Snapper back (center)	Line up formation
Recovery of fumbled ball.	Offense strategy
Fundamental plays	Defense strategy

Lead-Up Games[8]

1. Action Ball
2. Football Pentatholon

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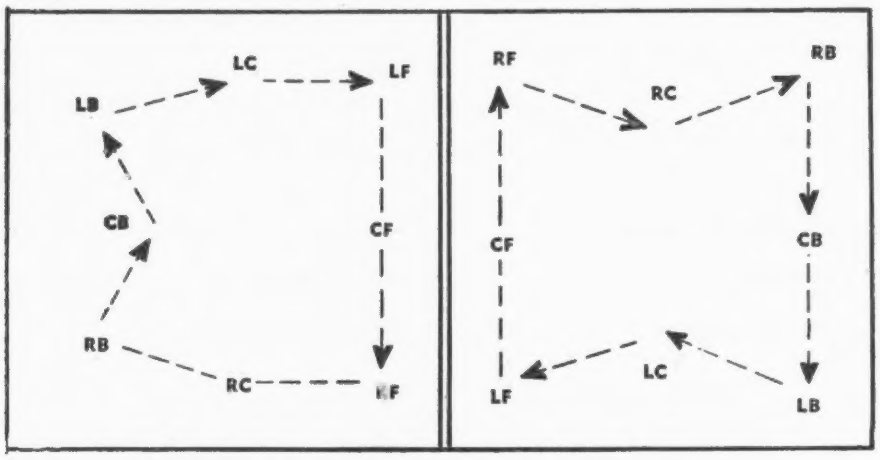
[7] LaPorte, op. cit., p. 22.

[8] AAHPER, op. cit., pp. 129-150.

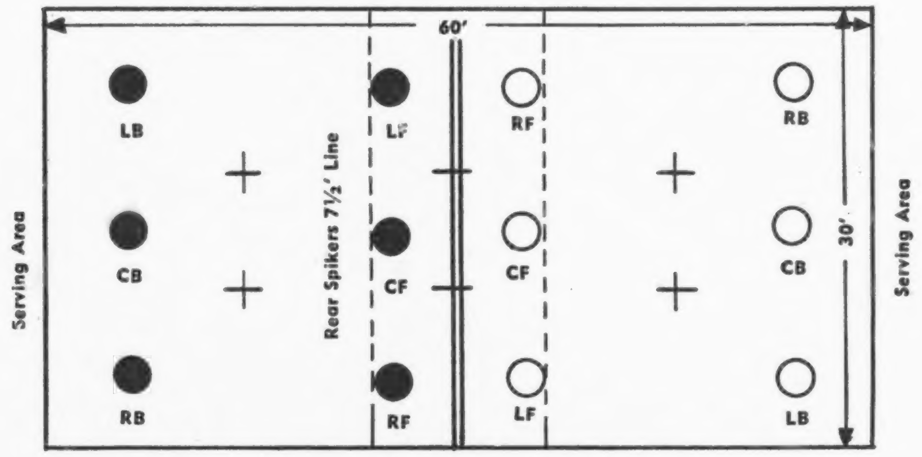
Volleyball

Volleyball is one of the few games having its origin in the United States. It was originated by William G. Morgan at the Holyoke, Mass., YMCA in 1895. His purpose for inventing this game was to provide an indoor game for the winter months.

Today the game is played by all age groups. Thousands of courts have been laid out on school grounds, recreation centers, clubs, and camps.



Girl's Positions with Order of Rotation



The Court and Boys' Positions

Fundamental Skills[9]

VOLLEYBALL (Elementary)	VOLLEYBALL (Advanced)
Underhand service	Review elem. fundamentals
Passing ball	Handling low ball
Practice stunts	Overhead service
Rotation	Handling high ball
Recovering ball from net	Passing up
Position play	Setting up
Placing serves	Spiking "killing"
Side arm service	Blocking
Team play	Attack
	Defense

[9] LaPorte, op. cit., p. 22.

Lead-Up Games[10]

1. Blitzball
2. Four Squares
3. Serve Ball
4. Volleytennis

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[10] AAHPER, op. cit., pp. 313-339.

Chapter
VIII

Stunts, Tumbling and Gymnastics

This area of teaching has tremendous value toward physical fitness development. More physical education instructors are receiving college training and school equipment is becoming more plentiful. A year of concentrated gymnastics could wipe out almost all physical fitness failures.

Objectives:

1. Give students an opportunity to satisfy their natural desire to climb, hang, swing, jump, bounce, support, and balance.
2. Develop strength and endurance, particularly in the arms and shoulders.
3. Develop agility and flexibility.
4. Develop a sense of balance, rhythm, and timing.
5. Develop such characteristics as courage, perseverance, and confidence.

Stunts

These activities may be used in open order as part of the calisthenics lesson or they may be used as squad activities. Many of these stunts may be used in races and relays.

Floor stunts. These are simple stunts performed without the use of mats. In each classification there are individual and partner stunts, stunts with and without forward movement, contest stunts, and stunts that require simple equipment such as chalk, wands, or pieces of paper.

Mat Stunts. These are stunts that can be performed safely only with the use of mats.

Tumbling

Tumbling involves moving from place to place while turning about one of the axes of the body. These skills may be performed by individuals, partners, or trios.

The development of several tumbling skills should begin in the lower grades. These skills may be used for warm-up and review, and variations and combinations may be properly taught in the junior and senior high school.

Individual Tumbling

Forward Roll

Start from a squat position with knees together between the arms, and the hands placed flat on the mat with fingers forward. Lean forward, push off with both feet, and rock forward on the hands. As the body begins to turn over, tuck in the chin to the chest. Gently roll down the back of the neck to the shoulders, back, seat and on to the feet into a squat stand. As weight rests on neck and shoulders, grasp the ankles to hold a tight tuck in the roll.

Spotters, in position on either side of the performer, place their hands at the back of the head of the performer and assist the performer in tucking his head.

Variations:

a. Hold arms out from side.
b. Fold arms across chest.
c. Start from a straddle stand and end in a straddle stand.
d. Add twist by crossing legs or by jumping and turning at completion of roll.

Backward Roll

Start from a squat position with ample mat behind the performer. Push off with the hands, roll backward onto seat, back, and then shoulders, bringing hands backward to a position alongside the head, palms down, and fingers pointing toward the shoulders. As the weight rolls over the shoulders and onto the hands, push with the hands and turn over in a tight tuck into a squat stand.

Spotter places his hands on lower back of the performer and assists him in turning over.

Variations:

a. Backward roll with body extended as weight comes over the hands.
b. Backward roll from a straddle stand to a straddle stand.
c. Backward roll with twist.
d. Backward roll to headstand.
e. Backward roll to handstand.

Dive Roll

The dive roll is performed like the forward roll, but it starts from a stand and there is a period of flight between the time the feet push off and the hands contact the mat. The performer dives, lands on the hands, and then rolls.

Spotting is the same as for the forward roll.

Variations:

a. From a take-off mark, dive a specific distance to a landing mark on the mat.
b. Dive over one or more students who are side-by-side.
c. Dive for height over a wand or other object.

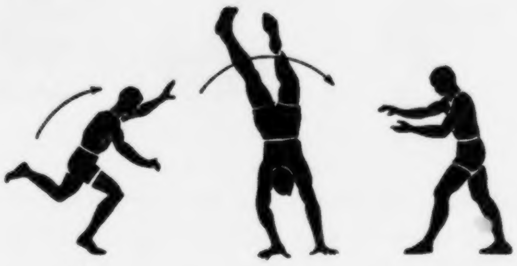
Cartwheel

The spotter stands behind the performer and gives support as the performer turns over on hands, keeps performer in vertical

plane, and adds momentum to the turn.

Round-Off

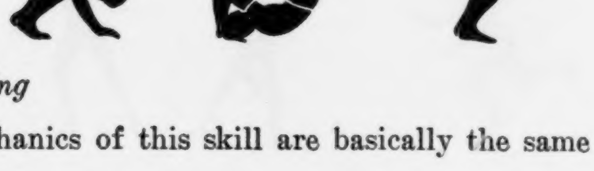
This skill is used to make a half turn from a forward position to go into backward movements such as backward rolls, handsprings, or somersaults. Approach the mat with a short run, swing both arms up, and swing take-off foot up, taking a skip-step on the other foot. Swing the take-off foot down to the mat, placing the hands in line with the take-off foot with fingers pointing towards the same side as the take-off foot. The opposite leg swings over the head, followed closely by the take-off leg. The body makes a quarter of a turn on the way up and another quarter of a turn on the way down, passing vertically through a handstand position. Land on both feet with body now facing the opposite direction.



Kip

Starting position is the same as for the forward roll. Begin the forward roll and straighten the legs as neck and shoulders are lowered to the mat. As the back of the neck and shoulders contact the mat, extend the hips, whipping the legs up and forward to about a 45° angle, and attempt to raise the trunk of the body by pushing with the hands. The feet should be brought to the mat as close under the body as possible. Finish in a standing position.

The spotter places his hand under the performer's shoulder and assists by lifting as he executes the push.



Head Spring

The mechanics of this skill are basically the same as for the kip. The difference is that the take-off is from the hands and the head rather than hands and back of the neck. The hands and head are placed in the same position as for the headstand.

Hand Spring

Start with the same run-and-skip step used for the round-off, but as the hands are brought to the mat, place them parallel to each other about shoulder-width apart with fingers pointing forward. One leg is thrown up and over the head and hands, the other follows closely, and the back is arched. The performer passes through a handstand position, turns over, and lands on his feet.

The spotters place one hand behind the performer's neck and the other hand on his wrist. The hand on the neck assists in getting the performer over and on his feet, the other hand prevents the performer from overthrowing the handspring.

A simple routine using these basic skills follows:

1. handspring
2. forward roll
3. dive roll
4. headspring
5. cartwheel
6. round-off
7. backward roll
8. roll back to kip position and kip

Dual Tumbling

Double Roll

A lies on his back with knees raised. B stands behind the shoulders of A. A grasps the ankles of B and B grasps the ankles of A. B does a forward roll between the legs of A, then A should do a forward roll between the legs of B. Partners should remember to keep legs bent at all times and to land rolling easily onto rounded shoulders.

Spotting is the same as for forward roll.

Back-to-Back Pullovers

A and B stand back-to-back and clasp hands. A bends at the waist and pulls B over his back to a standing position. B should aid A by doing a backward roll over A's back as A bends and pulls. Spotter should help pull B over.

Bobbin Ahead

B goes into a handstand position, placing legs astraddle A's head from behind. A then pulls B over by grasping B's ankles. B should aid A by sitting up as A bends forward.

Bobbin Back

Reverse the above procedure. Spotter should stand on either side of A and help A to pull B.

Knee-Hand Spring

A lies on his back with knees bent and feet flat on the surface, heels close to the buttocks. B runs short distance, uses the skip-step, places his hands on A's knees, and completes a handspring with the help of A pushing on B's upper back. The spotter should stand at knees and, as B places his hand on A's knees, place his hand behind B's head to lift him to a standing position.

Individual Balancing

Squat Head Stand

From a squat position with knees resting against the elbows, lean forward until the head touches the mat and raise the feet off the mat. Balance in squat position on hands and head.

Tip-Up

Place the hands on the floor between the legs with elbows inside of knees. Bend the arms with knees supported above the elbows, lean forward until the feet are off the floor and balance with only the hands contacting the floor. Spotter can assist student by easing him forward and helping him to maintain balance.

Head Stand

Hands are placed on the mat, shoulder-width apart, with fingers pointing forward. The forehead is placed about 10 inches in front of the hands forming a triangle with the hands and the head. Bring the feet close to the hands, raise the hips, give a slight push from one foot, and raise the feet upward. Arch the back, keeping the feet together and the toes pointed. Spotter can assist student in maintaining balance.

Forearm Head Stand

Assume the headstand position. The student lowers one arm at a time so that the elbows rather than the hands form the base of the triangle with the head as the apex. The student will have to increase the arch of the back in order to hold the headstand position. At that time when the student can satisfactorily hold the forearm headstand, he can lift the head from the mat and is then in the forearm stand. Spotter should stand at the student's side to assist him in keeping his legs in the air.

Handstand

Place hands on the mat, shoulder-width apart, one leg extended backward, the other leg in a squat position, with eyes fixed on a spot in front of the hands. The outstretched leg is thrown into the air at the same time that the bent leg is thrust from the floor, so both legs are in the air at the same time. Feet are brought together overhead with legs straight, toes pointed, and back arched.

Compensate for over-balance by pushing down with the finger tips and looking up (or raising the head). Compensate for underbalance by bending the elbows until the balance is corrected and then pressing back into the full handstand position. Spotting is the same as for headstand.

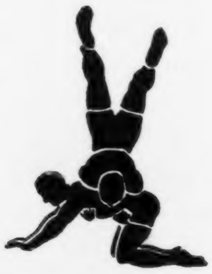
Dual Balances

Thigh Balance

A and B face the same direction, one behind the other. A squats and places his head between B's legs. A then lifts B onto his shoulders, placing his hands on B's knees to help him maintain balance. B then places his feet on A's thighs and stands up. A should hold B at the knees. Spotter should stand at the side so he can aid both students.

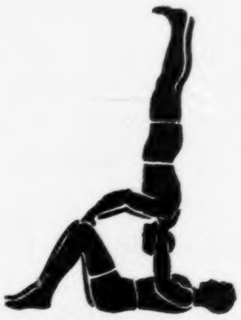
Chest Balance

A drops to his hands and knees. B places both arms under A's chest and then kicks into a balance position. Spotter should stand at B's side to help him to the balance position. He should also be sure that B does not slide over A's back to the floor.



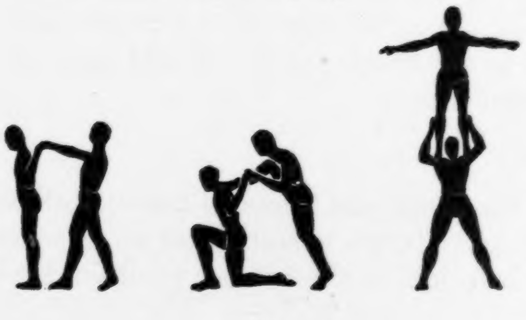
Shoulder-Knee Balance

The shoulder-knee balance is a combination of a support and a headstand. A lies on his back with his knees bent and his heels close to his thighs. B places his hands on A's knees and his shoulders in A's cupped hands. B can then kick into a balance position with his legs in the air. Spotter should stand at the side and help B keep his balance.



Foot-Shoulder Mount Balance

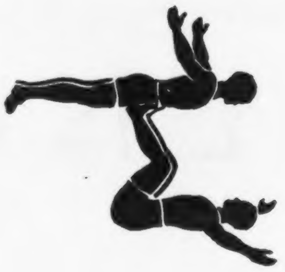
B stands behind and to the side of A. Both then clasp right hands and left hands. B then steps on A's right thigh with his right foot. At the same time A pulls B with both hands. B places his left foot on A's left shoulder and his right foot on A's right shoulder. While in this position B should straighten his legs, keeping his heels together leaning against A's head. As B gains confidence, he can release the hand clasps.



The spotter should stand behind B as he attempts to step up to A's shoulders and assist B in case he should lose his balance and fall backwards.

Front Swan

A lies on his back. B places A's feet at his pelvis, keeping his heels together. B clasps A hand-to-hand. A then pulls and lifts B to a balance position, releasing his hands when the balance is assured. Spotter should stand at the side and help B maintain balance.



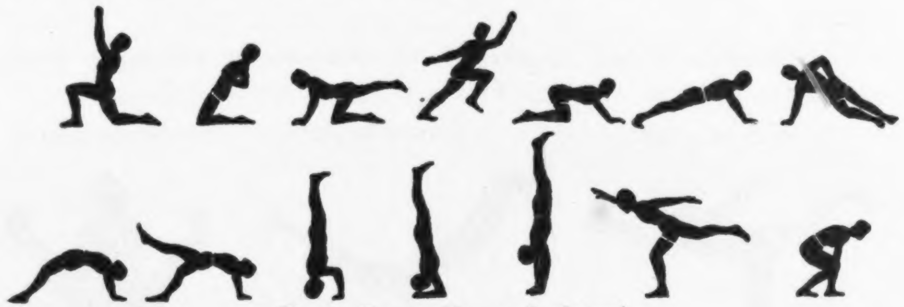
Hand-Chest Balance

A lies on his back. B stands at A's head, facing length of A's body. B bends forward and places his hands on A's chest, with fingers pointing slightly to the side. A raises his arms and places his hands on B's chest, interlocking their arms. B kicks up to a handstand position.

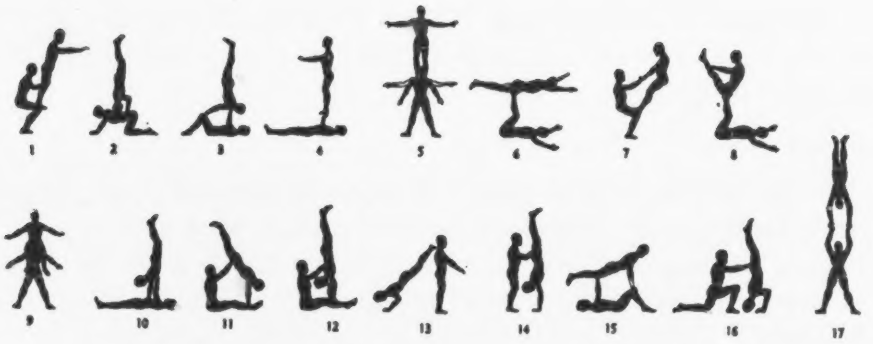
Pyramids

Use strong, heavy boys or girls for bottom, medium sized ones for the middle, and small, light boys or girls for the top. Start with techniques of mounting, dismounting, linking, holding, and balancing. Use definite signals to assume positions and return.

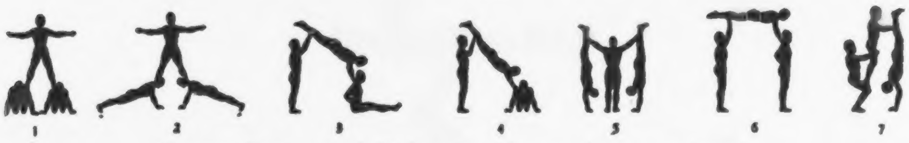
Below are some illustrations of single, couple, and group poses which may be used for end pieces of pyramids.



Single Poses (for end pieces)



Couple Poses and Balances (for end pieces)



Group Poses and Balances (for ends or centers)

Floor Exercises

Floor exercises consist of balancing, agility, flexibility, strength, and tumbling movements, rhythmically and harmoniously combined.

The floor exercise is performed in an area approximately 40 feet square. The exercise consists of a mount or starting skill, the body of the exercise, and a dismount or ending. The mount is usually a tumbling series or an impressive strength or balance stunt. In the body of the exercise the performer usually demonstrates strength, balance, flexibility, and agility. The dismount, like the mount, is usually tumbling, balancing, or a strength stunt.

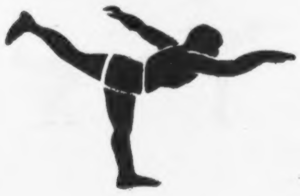
Tumbling

All the skills listed in individual tumbling may be used for free exercise. However, for safety, these skills should be practiced on a mat prior to attempting them on the floor.

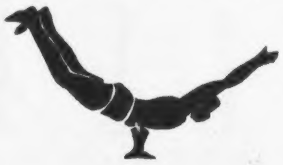
Balances

All the skills listed in individual balances or as single poses may be used in free exercise. Other balances are as follows:

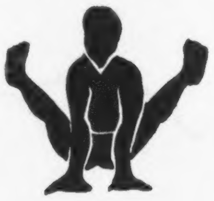
Front scale



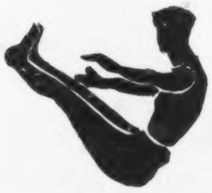
Elbow lever



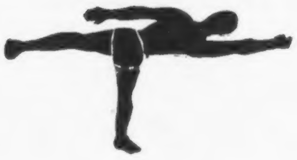
Straddle seat



V-seat



Side Scale



Strength

The simplest strength skills for high school students will be such pressing movements as:

Press to a headstand from tip-up position.

Press to a headstand from a straddle-angle stand, keeping legs straight.

Press to a headstand from a front-lying support, keeping the legs straight.

Press to a handstand from tip-up position.

Press to handstand from a straddle-angle stand, bending the arms but keeping the legs straight.

Flexibility

Examples of flexibility skills are:

Splits with legs sideward or with one leg forward and the other spreading backward.

Back bends from a stand or from a kneeling position.

Trunk flexion with head touching to knees from a standing or sitting position.

Trunk flexion with head touching the floor between legs from a straddle seat.

Agility

Individual stunts without forward motion such as the single leg circle may be used. Other agility skills are:

Straight fall from a stand to a front-leaning support with one leg hyperextended.

Backward fall with half turn to a front-leaning support with one leg hyperextended.

Floor vaults from a front-lying support to a seat or to a rear-lying support. Squat vault, stoop vault, straddle vault, flank vault, or rear vault may be used.

Gymnastics

Gymnastics are adaptable to all levels, both sexes, and most body builds. Children may learn and enjoy performing simple stunts while teenagers are being challenged by more advanced stunts and older participants are maintaining normal physical fitness. With such a diversity of activities and a wide range of skills within each activity, there is an event in which each person may participate and succed regardless of age, sex, or body build.

In a gymnastic program where proper facilities, adequate supervisor, and good instruction are provided, students are taught to spot and perform safely. They are taught the carry-over values of gymnastics skills into every-day life situations such as how to recover one's equilibrium in order to prevent or break a fall, or how to absorb the shock of landing from a high jump.

Equipment

A minimum of equipment to conduct a gymnastic program would include one horse, one horizontal bar, one trampoline, one springboard, one set of parallel bars, one set of rings, and six 5' x 10' mats. If cut-out mats are purchased for the horse and the parallel bars, four mats will be sufficient for the other pieces of apparatus and for tumbling.

Equipment should be selected to allow ease of movement from place to place and ease in adjustment in height and width. It should be durable, safe, and stable when set up. Equipment used for senior high school programs should meet official specifications for competition.

Safety

1. Have good organization and supervision of class.
2. Develop necessary strength for skills.
3. Warm up before beginning tumbling or apparatus work.
4. Allow no horse play.
5. Always use mats wherever necessary.
6. No student should be allowed to attempt a skill without adequate spotting.

7. Follow through on stunts. Don't change your mind in the middle of a stunt.
8. Inspect cables on rings and horizontal bar for proper and secure attachments. Check height and width adjusting devices to make sure they are secure.
9. When possible, use such safety devices as handbelts, overhead belts, spotting belts, and nets.
10. Use chalk (carbonate of magnesium) on hands to prevent slipping.

Teaching Suggestions

Progression — Use a progressive series of skills which may be checked off on a list as they are accomplished. As soon as several skills are learned in an event, combine these into a short series or routine, and gradually lengthen the series as more skills are learned.

Squad Work — Divide the class into homogeneous squads with one squad for each teaching station. When possible use trained leaders for each squad. Limit squad size to a small number, preferably six to eight, so that each student will have greater opportunity for participation. Make up a squad rotation chart and post it.

Teaching — Instruct proper techniques of spotting the skill as well as performing it. Use student demonstrators so that the teacher can point out important features of the skill as it is being performed.

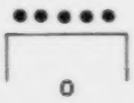
Many skills can be taught in open order formation in a mimetic form prior to attempting the skill on the apparatus. Proper landing positions (seat drop, hand and knee drop, etc.) on the trampoline can be taught by having students assume these positions on the floor and quickly checking them for proper position. In vaulting, students can learn to squat, straddle, or stoop from a front-leaning rest (push-up position) to a stand, thus simulating the action of the squat, straddle, or stoop vaults.

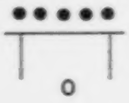
Encourage good form but do not overstress it. Teach skills on lowered apparatus before attempting at regular height. Limit instruction to two or three events per period and introduce no more than three or four new skills per event.

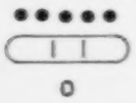
Alignments

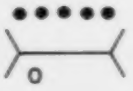
Good alignments help to organize students quickly, maintain control of the class, and maintain safety. The teacher should generally keep the apparatus between him and the students, and should be in a position to give assistance if needed.

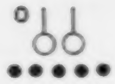
For activities using standing starts, students should be aligned parallel to the long axis of the apparatus or mats.


Mats

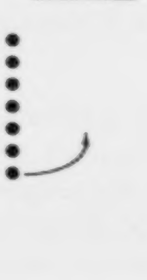

Parallel Bars

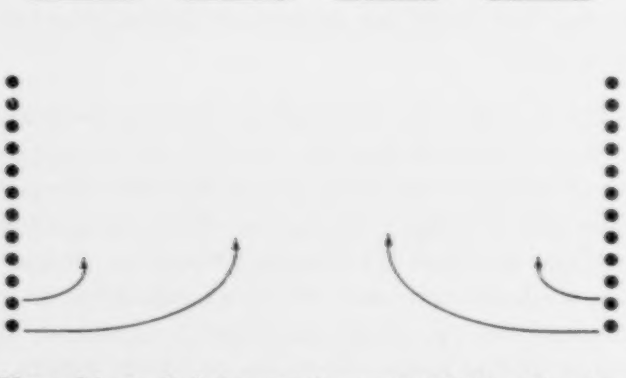

Horse


Horizontal Bars

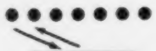

Rings

For activities using running starts, students should be aligned parallel to the line of run (or perpendicular to the long axis of the apparatus or mats.) Students may be in one or two lines, depending on whether it is squad work or class work, the number of pieces of apparatus, and the class size.

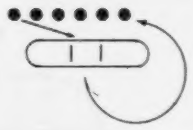

Squad Work


Class Work

For apparatus adjustable to height, students should be lined up according to height. For activities using standing starts, students may use direct approach and direct return, or if returning may interfere with performer, students may use direct approach and indirect return.

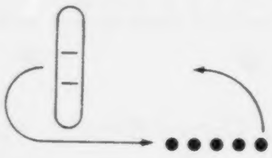


Direct-Direct



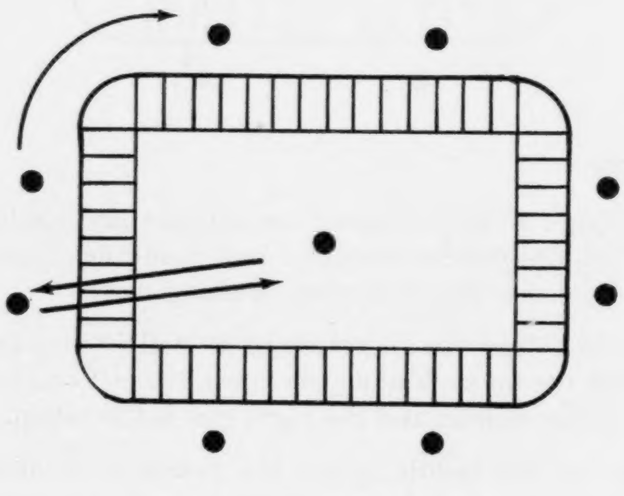
Direct-Indirect

For activities using a running start and for activities in which student returning may interfere with performer, students may use the indirect approach and return, ie., as in vaulting activities.

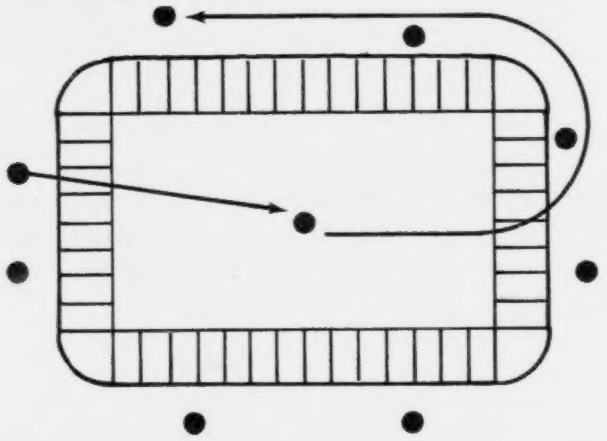


For trampolining any one of the following alignments and approaches and returns may be used.

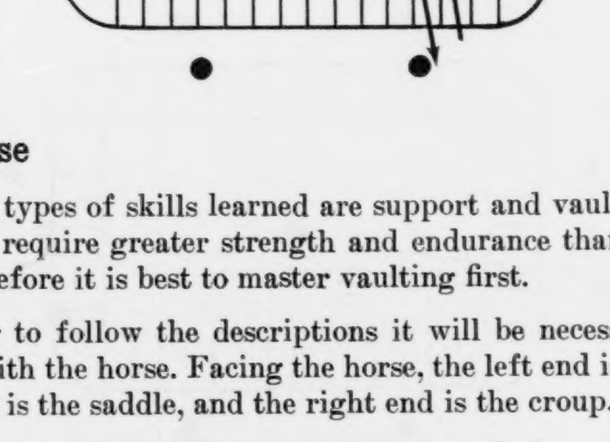
Circling Method. One end of the trampoline is used for mounting and dismounting. The first student mounts, performs skill, and then dismounts. All students rotate one position clockwise, keeping evenly spaced around the trampoline, and second student mounts. Continue until all students have had a turn.



Circling method can be used with dismount at far end and return to space in alignment.



Direct Approach and Direct Return. Student mounts and dismounts from his position. Remaining students adjust to fill in vacant space.



Side Horse

The two types of skills learned are support and vaulting. Support skills require greater strength and endurance than vaulting skills, therefore it is best to master vaulting first.

In order to follow the descriptions it will be necessary to be familiar with the horse. Facing the horse, the left end is the neck, the middle is the saddle, and the right end is the croup.

Stand facing the saddle, grasp the pommels in an overhand grip, and jump to a straight-arm front support. All support work described will start from this position. However, support may be performed at the neck or croup.

Single-Leg Half-Circle Forward and Return Mount

Shifting the weight to the left, swing the right leg to the right and forward under the right hand, releasing the right hand from the pommel and re-grasping after the leg is forward. Now swing the leg back under the right hand to the starting position. This skill should now be repeated with the left leg. A single-leg half-circle may also be performed backward, starting from a rear support position.

Single-Leg Half-Circle, Alternate Leg, and Return

Start as above, but after the right leg comes forward shift the weight to the right hand and bring the left leg forward. After the left leg comes forward, shift the weight to the left hand and take the right leg back. After the right leg comes back, shift weight to the right and bring the left leg back. End up in starting position.

Single-Leg Circle

From a front support at saddle, swing the right leg forward under the right hand and then backward under the left hand, executing a complete circle. Always shift weight to supporting hand as leg circles under released hand. Repeat with left leg.

Reverse Single-Leg Circle

From a front support at saddle, circle right leg forward under left hand and then back under right hand. For reverse, left-leg circles start by circling left leg under right hand and then left hand.

Double-Leg Half-Circle Forward and Return

From a front support at saddle, swing both legs forward under right hand to a rear support and then back again under right hand to a front support. Repeat going to the left.

Front Scissors

From a front support at saddle, execute a single-leg half-circle with the right leg. Continue to circle right leg to the left as though performing a single-leg full-circle. As the right leg swings back under left hand, swing left leg forward in a scissoring action, regrasping the pommel with the left hand. Repeat with left leg scissoring under right leg and right hand.

Single Rear Dismount from Feint

Bring right leg forward around right pommel without releasing grip. This is called a feint. Now swing right leg back forcefully, developing momentum, to circle to the left. Bring both legs forward under the left hand with the rear surface of the body passing over the left end of the horse. Land in a stand with left side toward the horse and left hand on left pommel.

Vaulting

Vaults may be performed between the pommels across the side horse or lengthwise over the long horse without pommels. Vaulting over the side horse should precede long horse vaulting.

All of the following vaults over the side horse, unless otherwise indicated, begin with a short run, placement of hands on the pommels, and a take-off from both feet. Then spring upward over the horse to a standing position on the opposite side.

Squat Vault — Draw the knees to the chest in a tucked position between the arms, push downward with the arms, and land on the far side with back toward the horse.

Straddle Vault — Jump, flex hips and spread legs, pass over the horse with legs straight and outside the arms. Bring legs together before landing.

Wolf Vault — Pass over horse with one leg in squat position and the other in straddle.

Stoop Vault — Similar to squat but legs are kept straight when passing over horse between the arms.

Front Vault — Spring, swing the body to one side, and make a quarter turn so the front of the body passes over and parallel to the horse.

Flank Vault — Spring, swing the body to one side, allowing the side of the body to pass over and parallel to the horse.

Rear Vault — Swing both legs to the right, make a quarter turn right so the rear surface of the body passes over the horse. Land with the right side toward the horse.

Thief Vault — Take off from one foot, raise the other foot forward, and quickly bring the take-off foot up to join it. Both legs precede the body and pass over the apparatus before the hands contact the apparatus.

Springing movements, such as neckspring and handspring, may also be performed over the side horse.

All of the following long horse vaults begin with a short run, a double take-off from a spring board, a dive, and then placement of the hands on the neck end of the horse. Then follow with the execution of the vault as previously described for side horse. The description for the vaults on the long horse are the same as those for the side horse except that they are preceeded by a dive over the length of the horse.

The straddle, the squat, the stoop vault, handsprings, and cartwheels may also be performed on the long horse.

Prior to attempting the straddle, squat, or stoop vault over the length of the horse, the following lead-up steps should be used:

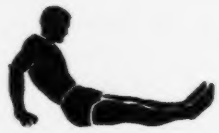
Run, jump with double take-off, and land in stand on the near end of the horse. Assume a front-lying support position and then execute the vault.

Trampolining

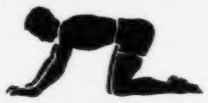
It is recommended that no physical education instructor permit any student on a trampoline unless he can perform the forward and backward rolls satisfacorily and has a fair comprehension of body balance and coordination. Because of its fascination, the trampoline left open in the gymnasium may be used by any one having access to it. Trampolines should be kept locked, and should be used only in supervised periods. This phase of the tumbling program often meets with adverse criticism because those who are injured on the apparatus do not have the basic skills necessary to begin instruction on the trampoline.

The Break — This should be taught first, as it is a safety device used by the student trying stunts from the trampoline bed. As the student bounces and hits the bed, he should bend his knees, which will stop his bounce. This can be done whenever the student feels as though he might lose his balance.

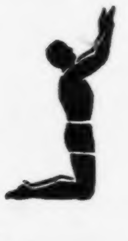
Seat Drop — Sit on trampoline bed, trunk erect, legs together, toes pointed, and hands next to the hips on the bed. The student should assume this position on the bed before attempting the drop. Take low bounces, landing in this position, and returning to the feet.



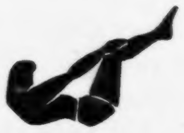
Hand and Knee Drop — The student should assume a position with arms shoulder-width apart and knees slightly spread on the bed before attempting the drop. Take low bounces, landing on the hands and knees, and returning to the feet.



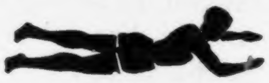
Knee Drop — Body straight but knees bent. Land on knees and insteps.



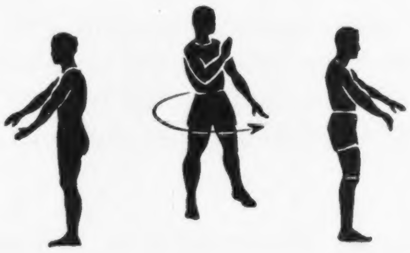
Back Drop — Land on back between shoulders and hips. Hips are flexed, hands placed on knees, and chin tucked against chest.



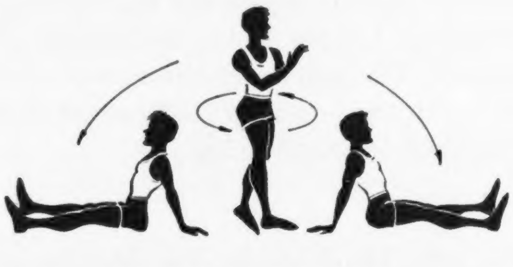
Front Drop — Land on entire front surface except neck and face. Arms are bent slightly and hands are a short distance in front of face.



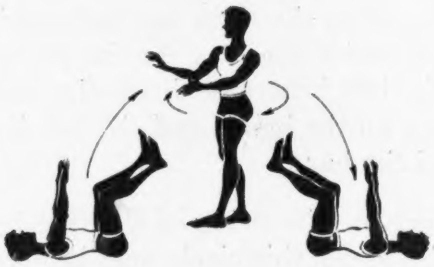
Half-Twist Standing — The student should bounce normally on the bed and when he is in the air, he should throw either hand against the opposite shoulder which will cause him to turn on a longitudinal axis. He will then be facing the opposite direction from that in which he started. This will accustom the student to the twisting movement.



Seat, Half-Twist, Seat — The student should bounce and do a seat drop. As he attempts to return to a standing position, he should do the half-twist and hit the bed in a seat drop facing the opposite direction. He will not touch the bed after the first seat drop until he has done the last seat drop. Twist is made in a vertical position with body straight.



Back, Half-Twist, Back — The student should bounce and do the back drop. As he attempts to return to the standing position, he should throw the half-twist and hit the bed in a back drop facing the opposite direction. He will not touch the bed after the first back drop until he has done the last back drop.



Horizontal Bar

If an adjustable horizontal bar is available it is best to learn the skills at shoulder height before attempting them at competitive height (8 feet).

Skin-the-Cat

Holding the bar with regular grip (palms forward), lift knees to chest in a tuck position between the arms and turn over backward to a hang. Return by pulling the legs up between the arms and turning over forward to original position.

Pull-Over

Using a regular grip, flex at the hips, and raise legs and hips upward toward the bar. At the same time flex the arms, pulling the legs and hips over the bar until the upper abdominal region contacts the bar. Straighten up to a front support on the bar.

Underswing

From a front support with regular grip, drop the shoulders backward and at the same time flex the hips, raising the legs to the bar. As the body passes under the bar, extend the hips and pull with the arms, causing the feet to shoot upward and outward and then downward. The hands are released as the body follows the arc through which the feet have just passed. Land in a standing position with back toward the bar.

Single Knee Swing-Up

With a regular grip, bring one leg between the hands and hook the knee over the bar. Keeping the opposite leg straight, swing it forward, downward, and then backward under the bar. Pull with the arms and swing up to a support position.

Single-Knee Circle

From a support with regular grip and left leg over the bar between the hands, swing the right leg backward and then downward and forward under the bar. As the right leg is swinging backward, hook the left knee and throw the head and shoulders backward. Pivoting on the hands and the left knee, make a complete circle around the bar.

By reversing the grip, the swing of the free leg, and the throw of the head and shoulders, this circle may be executed forward.

Backward Hip Circle

From a front support with regular grip, flex the hips slightly, and then extend the hips swinging the legs backward. As the hips swing forward and contact the bar, flex the hips and drop the shoulders backward, causing the body to rotate around the bar.

Drop Kip

From a front support with regular grip,drop backward to a pike hand (as in the under-swing, but do not extend on the front swing). Hold the pike until the body begins to swing backward and upward, and then extend the hips and pull with straight arms to a front support on the bar.

Parallel Bars

Learn the skills on the low parallel bars at chest height before attempting them on bars adjusted to full height. Working on the parallel bars requires strength in the upper arms and shoulders. The first few skills are used to develop strength in these regions.

Forward Hand Walk

Jump to a straight arm support at the end of the bars, facing inward. Walk the length of the bars, taking small steps with the hands. Shift weight to the supporting hand while moving the opposite hand forward.

Dips (*Vertical Push-Ups*)

From a straight arm support, flex the arms until the shoulders are lower than the elbow, then straighten the arms and return to starting position. Repeat several times to increase strength. Dips may also be executed either at the front end or back end of a swing.

Swing

From a straight arm support, flex the hips, raising the legs forward. Then extend the hips, causing the legs to swing from the shoulders, keeping the arms straight and the body arched. Lean in opposite direction of swing.

Vault Dismounts

The flank and rear vaults may be executed at the beginning of the swing, and the front vault may be executed at the end of the swing. These vaults have been previously described in vaulting activities. Vaults should be executed at the peak of the swing where the body can clear the bars in coming off. One half or full twist may be added, turning in toward the bars or out away from the bars, in order to increase the difficulty and make the vaults more challenging.

Straddle Seat Travel

From a straddle seat near the end of the bars, lean forward and place the hands in front of the thighs. Shift the weight onto the straight arms and swing the legs backward above the bars, downward between the bars, and forward above the bars to a straddle seat in front of the hands. Repeat, traveling to the end of the bars.

Single Leg Cut-Off Dismount

From a straight arm support at the end of bars facing outward, swing the body backward. At the peak of the backswing, raise the hips and straddle the right leg outside the right bar and under the right hand. Weight must be shifted to left as right hand releases. Land in standing position.

Repeat, but cut off with left leg. This may progress to a double leg cut-off dismount.

Shoulder Balance

Starting from a straddle seat with hands in front of thighs, lean forward and place the upper arms on the bars with the elbows out to the side. Then raise the hips and extend the legs overhead to an inverted balance position on the shoulders. Keep the legs straight, toes pointed, back arched, and head up. Lower to starting position or pike and roll over forward to a straddle seat or to an upper arm hang.

Uprises

Bars must be raised so student can hang by upper arms between the bars. From this position obtain a vigorous swing and on the peak of the back swing, arch the back, and pull downward with the hands, causing the body to rise to a straight arm support. This is a back uprise. By piking and pulling at the forward end of the swing, a front uprise may be executed.

Upper Arm Kip

From an upper arm hang between the bars, flex the hips and raise the legs over the head to a pike position above the bars. From this position allow the body to start to roll forward again, extend the hips, and pull with the arms, causing the body to rise to a straight arm support.

Rings

Still ring skills should first be learned at approximately shoulder height. A few of the many still ring skills are listed below in their recommended order of progression.

Pull-Ups

Grasp the rings and flex the arms, pulling up into chin-up position with body straight. Variations are to pull up with the body flexed or "L" position, or to pull up and then extend one arm sideward, bring it back, and repeat with the opposite arm.

Inverted Hangs

Grasp the rings, bending at the hips and knees, and pull the body to an inverted tuck position between the rings. From this position straighten the legs to an inverted pike hang with legs close to chest. From the pike hang, straighten the hips to an inverted straight hang with back arched, arms straight and close to body. Return to a stand. Each hang may be performed separately, dismounting after each one, or in sequence.

Birds Nest

From the inverted squat-hang-position, place one foot in each ring. Continue to turn over backward until the back is arched and the front of the body is facing the mat below. Reverse procedure and return to a stand.

Skin the Cat

Refer to this skill on the horizontal bar.

Single-Leg Cut-Catch

From an inverted pike-hang, swing both legs forward and upward with the left leg passing between the rings and the right leg hooking over the right hand. As the body rolls forward, pull with the arms, and then release the right hand so the right leg can cut between the hand and the ring. Quickly re-grasp the ring before the arms extend fully and then drop the body to a hang. Repeat with opposite leg. This may progress to a double-leg-cut dismount forward.

Double-Leg Straddle Dismount Backwards

Grasp the rings. Swing the legs forcibly upward toward the rings and at the same time pull with the arms. Spread the legs to a straddle position and as the thighs contact the wrist, release both hands and throw the head back. Rotate backwards and land in a standing position on the mat.

Kip

From an inverted pike hand, extend the hips, swinging the legs forward and upward. At the same time pull with the arms, causing the body to rise to a straight arms support.

Dislocate

From an inverted pike hang, extend the hips, shooting the legs up and back at about a 45° angle. At the same time quickly spread the arms and turn the rings outward. The back is arched and the arms are straight as the body swings forward and downward to a hang.

Rope and Pole Climbing

Climbing is an activity that should be a part of all physical education programs. Students enjoy the skill and it contributes to the development of coordination, agility, and endurance.

Preliminary Exercises for Climbing

Lower the Back to the Floor and Pull-Up—From a stand, grasp the rope or pole at chest height. Keeping the body straight, lower hand-under-hand until the back touches the floor. Return to stand by pulling up hand-over-hand.

Chin-Ups—Tightly grasp pole high above the head, pull up to a bent arm position, and lower again.

Climb Down and Climb Up—Stand with rope hanging down the middle of the body. Grasp it high above the head with both hands. Raise the legs parallel to the floor and lower hand-under-hand until the seat and legs touch the floor. Practice descending until sufficient strength is developed to ascend it to the starting height.

Basic Climbing positions

Between Legs - Cross Leg—The front leg grips the rope or pole with the back of the ankle (achilles tendon), heel, and back of the knee. The back leg grips it with the front of the ankle and the front of the knee. The hips and legs are flexed with the arms straight.

Foot and Leg Lock—The rope passes between the legs, around the back of the right leg, and across the instep of the right foot. Step on the rope with the left foot, clamping the rope between the sole of left foot and the instep of the right foot.

Stirrup—The rope passes along right side of the body and right leg, under the right foot, and over the left foot, forming a half loop under one foot and over the other foot. Clamp the feet together.

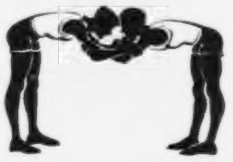
Using Hands Only—Rope or pole is held in hands and hangs down the midline of the body between the legs. Legs are free of it and held in semi-flexed position.

Human Apparatus

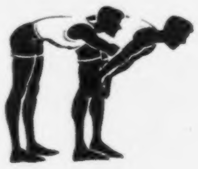
By working in squads with each member of the squad taking his turn performing, spotting, and substituting for the apparatus, a large class may participate in these activities which help to build strength, balance, timing and coordination.

Buck—Student assumes a straddle-angle stand with hands braced on knees. Vaults may be executed over the back, lengthwise or crosswise. In order to increase the difficulty, the student may stand erect with head bent forward to serve as a high buck.

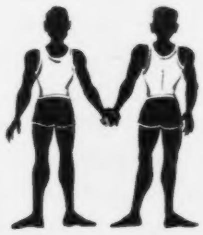
Side Horse—Two students assume a straddle-angle stand, facing each other with heads side-by-side, grasping each others' upper arms. Performer approaches from the side and vaults crossways over the two boys.



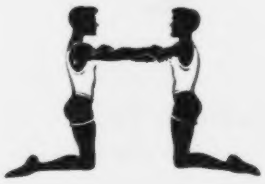
Long Horse—Two students assume a straddle-angel stand, facing the same direction with one behind the other. The student in the rear places his head alongside the hips of the student in front and wraps his arms around his thighs. The performer approaches from the rear and vaults lengthwise over the two boys.



High Vaulting Standards—Two students stand side-by-side with their inner hands grasped, outer feet slightly forward, and backs turned toward the performer. Vaults are performed between arms from a running start.



Parallel Bars—Two students, standing or kneeling, face each other with arms interlocked at shoulder height. Chest balance, upper arm balance, handstands, and backward turnover dismounts are a few of the stunts which can be performed on the human parallel bars.



By working in squads with each member of the squad taking his turn performing, spotting, and substituting for the apparatus, a large class may participate in these activities which help to build strength, balance, timing and coordination.

Evaluation

In gymnastics as in other sports students should be evaluated on skills and knowledge. Skill evaluation should include individual skills and skills combined into routines. Performing a routine in gymnastics is the same as playing the game in other sports.

A checklist may be used to determine the number of skills successfully accomplished. At points along the checklist, a simple routine may be required that uses the skills previously accomplished. Rather than prescribe the routine, encourage creativity by allowing the students to develop their own routines. The teacher may want to require two students in each event, prescribing one routine and having the students develop an original one.

Knowledge evaluation should include the following: how to set up and move equipment; how to care for equipment; names of skills, how they are performed; and how to spot them properly; safety rules and the use of safety or spotting devices; and rules of competition.

A simple scoring system to use in evaluation of individual skills is as follows:

0 points for non-performance
1 point for poor performance
2 points for average performance
3 points for above-average performance

Routines may be graded on a ten point basis as follows:

9-10 points for excellent
8-9 points for very good
7-8 points for good
6-7 points for fair
5-6 points for poor
0-4 points for unsatisfactory

Chapter
IX

Track and Field

The high development of track and field athletics in ancient Greece is now being paralleled and even surpassed today. Track and field have a majoh place in the physical education program. They incorporate mental movements which are a part of normal growth and development.

Objectives:

1. Develop coordination, endurance, speed, strength, and agility.
2. Improve fundamental skills that are needed in everyday life.
3. Provides an opportunity for teaching sportsmanship, fair play, and courtesy.

Events Suitable for Physical Education Classes

Junior High School:

1. Running events 220 (7th), 440 (8th), 880 (9th)
2. Shot put—8 pounds
3. Broad jump
4. High jump
5. Low hurdles—60 yards
6. Shuttle relays
7. Softball throw in lieu of discus and javelin

Senior High School:

1. Dashes—up to 440 yards
2. Runs—up to mile

3. Shot put—12 pounds
4. Discus
5. Broad jump
6. Pole vault
7. High jump
8. High hurdles—120 yards
9. Low hurdles—180 yards
10. Relays—up to mile

Checklist for Track Meet

By using the following checklist, whether the meet be small or large, instructors will not overlook any necessary preparations.

___ Number of contestants.

___ At least 4 properly adjusted stop watches.

___ Cross bars for high jump and pole vault.

___ High jump and pole vault standards.

___ Shot put and discus circles.

___ Broad jump board.

___ Whistles for starter and head judge.

___ Clipboards for clerk, head timer, head judge, and the judge of each field event.

___ Cards (2" x 3") for each timer and finish judge.

___ Sharpened pencils.

___ Surveyors pins for use in discus. The circular type of white tape so that the contestant's number can be written on it. A surveyor's pin should also be used to mark the shot put and broad jump.

___ Yarn, very soft, white or orange, to be stretched at the finish line 4 feet above the track.

___ Measuring tapes—steel.
    50′ for broad jump.
    25′ for pole vault and high jump.
    100′ for shot put
    200′ for discus
    100′ cloth tapes for competitors to mark check marks in the broad jump and pole vault.

___ Cards for discus, shot put and broad jump judges, ruled for preliminary and final throw recording.

___ Cards for high jump and pole vault judges, ruled for three trials at each height.

— Black powder shells.
— Batons for relays; mailing tubes can be used.
— Wet or dry lime marker for renewing starting lines and relay zone lines.
— Hurdles—10 for each lane, 5 spares for possible breakage.
— Public address system.
— Facilities for scorers.
— A hurdle chief and a well-organized crew of helpers. They must know the location of all hurdles and the height of the hurdle race to be run. The hurdle chief and two inspectors are responsible for lining up the hurdles properly. A cord stretched across the track is the accepted method.
— Two sticks with pronged ends to raise pole vault cross-bar.
— Foul flags for discus boundary lines.
— Stepladder for measuring the height of pole vault.
— Rule book.

Warm-Up Exercises

The most reliable and practical means of loosening up is the ordinary warm-up, which has traditionally consisted of jogging, windsprints, and stretching exercises first, followed by light jumping, throwing, or running according to the event concerned.

In some ways the human body may be compared to a motor that requires proper warming up before full power is turned on. The warm-up gradually accustoms the body to the activity by stimulating circulation which renders the muscles more useful.

During the track and field unit, each student can start off with a jog of approximately 440 yards to begin good circulation of the blood, loosening of muscles, and warming of the body. With the class lined up in formation, a group of exercises should be administered. Remember that the emphasis placed on the warm-up is determined by the instructor. The average student does not realize the importance of the warm-up and therefore does not warm-up sufficiently unless directed.

A recommended warm-up routine follows:

1. Push-Up—Do ten repetitions from the up position, lowering the body without touching the ground.
2. Leg Lifts—Lie on the back and keep the legs straight. Lift

them slowly from the ground until the soles of the shoes are facing the sky. Lower them slowly. Rest and repeat three times.

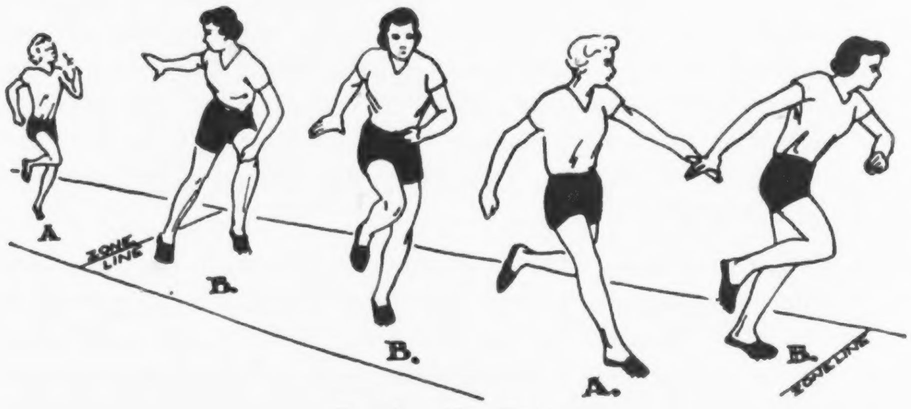
3. Bouncing Exercise—Bounce up and down on the balls of the feet alternately. Bounce on each foot five times.
4. Toe Touch—This exercise is performed from a standing position with arms crossed. Start by crossing the left leg behind the right with knees locked. Bring the feet as close to parallel as possible, then bend over as far as possible. Uncross arms and touch the outside of the foot, rise and touch again. Repeat with right leg behind left. Complete five repetitions.
5. Hurdle Stretch—The student sits in a hurdle position with the right leg extended to the front and the left leg bent to the side. Reach out with the left hand for the right toes. Reverse position of the legs, and repeat three times on each leg.
6. Body Circles—Stand with feet shoulder-width apart and rotate the head and trunk in a full circle, bending forward at the waist and backward at the top of the circle. Repeat in opposite direction. Complete two repetitions.
7. High Kick—Stand erect and alternate kicking with legs as high as possible. Kick each leg five times.
8. Windsprints—For a 30-40-30 windsprint, the student runs at a slow pace for the first 30 yards, then increases to ¾ speed for the next 40 yards, then he decreases his pace for the last 30 yards. Repeat two to five times.

Sprints

1. Sprints should be run at top speed.
2. The essentials for a sprinter: quick reflexes, good stride, ability to relax.
3. The starting positions. Hands—thumb and index finger on starting line. Body—leaning slightly forward. Arm—bent 90° at elbow, free through shoulder. Feet—right foot 13-19 inches from starting line; back foot 29-41 inches from starting line. Breathing—as a general rule, inhale through nose; exhale through mouth.

Relays

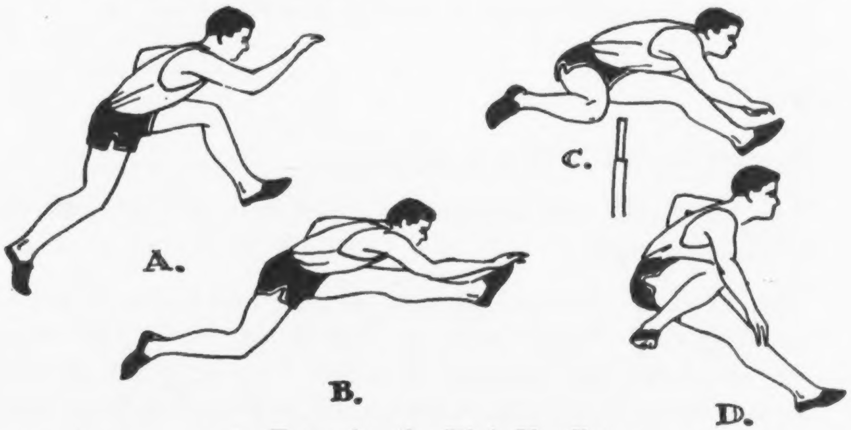
A skill requiring much practice is baton passing. Techniques of baton passing are introduced more fully in track and field texts. The baton should be carried in the left hand and passed to the right hand in the exchange zone of 20 yards.



Passing the Baton
(From AAHPER, Physical Education for High School Students. Washington: 1201 Sixteenth St., N. W., 1966. By permission.)

Hurdles

1. Start — same as sprinter.
2. Striding — for high hurdles, 7 strides to first one and 3 strides between; for low hurdles, 10 strides to first one and 7 strides between.
3. Hurdling — not jumping, but rather a high exaggerated step over the hurdle.



Form for the High Hurdles
(From AAHPER, Physical Education for High School Students. Washington: 1201 Sixteenth St., N. W., 1966. By permission.)

High Jump, Straddle or Belly Roll

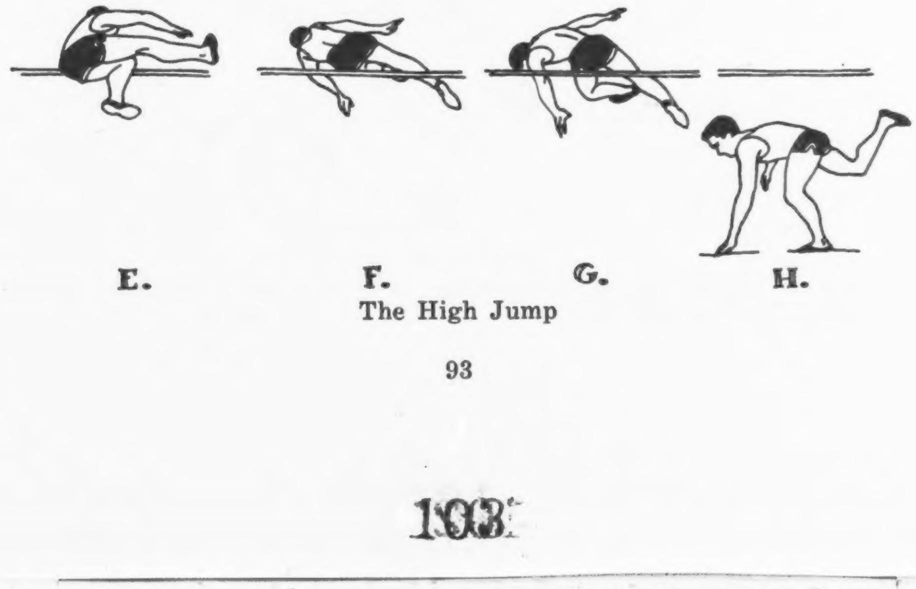
The straddle form of high jumping is the most common style today. This style of jumping is also called the "belly roll".

Approach—The angle of approach is approximately 30 degrees. The length of run must be long enough to give gradual and smooth acceleration to the desired speed at the take-off. The seven-stride approach is favored by most jumpers.

The last two steps before conversion of horizontal momentum to vertical force are very important. The eyes are looking higher than the bar, which helps keep the body weight back. The left leg is straight and is planted heel first in a very hard and fast fashion. The left leg bends before take-off to give a power drive from the left leg. The body is lowered, thereby lowering the center of gravity. The right leg must bend to avoid dragging spikes on ground. Arms are pulled back and down to aid upward drive.

Take-Off—The left leg strikes the ground hard with the heel hitting first. The arms move upward and are driven high into the air to aid in total body lift. It is best to try to keep a straight lead leg. The greater the drive upward and the straighter the lead leg, the greater is the potential for jumping higher.

Bar Clearance—The lead leg is driven well above the bar. The



The High Jump

head should be held up until over the crossbar and then dropped quickly. It is important that the left arm be carried close to the body during the roll. The right arm should be kept high during body lift and dropped down fast to aid in the roll of hips and right leg. The trail leg is shortened by knee flexion, thereby aiding a faster upward thrust. The trail leg is aided in clearance by thrusting the lead hand, arm, shoulder, and head down, and rotating and kicking the lead foot up.

Landing—The hands and the take-off foot should be used in the landing to break the fall.

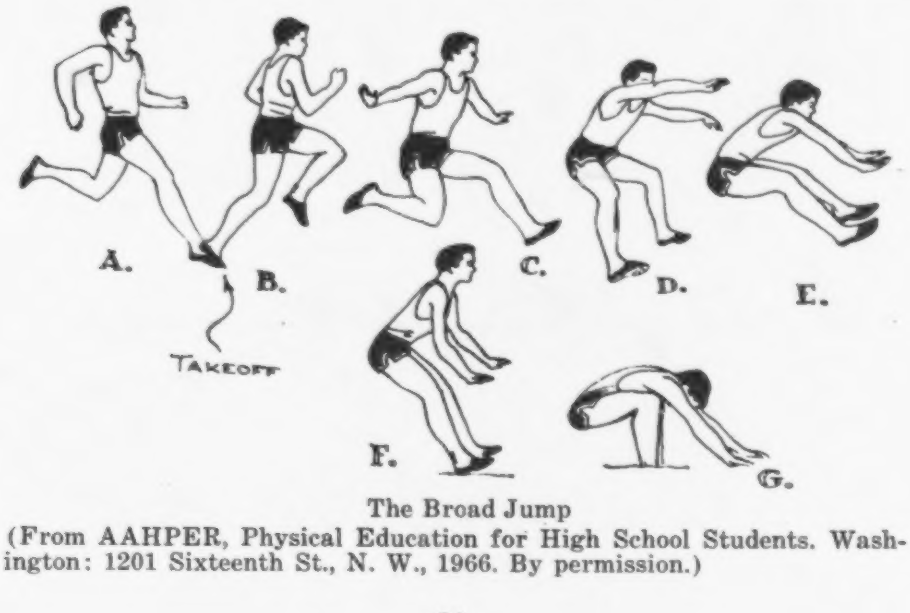
Broad Jump

Approach—The run in the approach should be at least 110 feet. It takes this much distance for most performers to obtain full speed.

The last stride should be 4 to 12 inches shorter than the preceding ones. This is necessary to move the body's center of gravity closer to the front edge of the take-off foot. This will enable a jumper to transfer his horizontal momentum into a vertical direction.

Take-Off—The jumper plants his foot flatfooted on the take-off board. This allows maximum distance through which the foot can planter-flex and develop maximum force.

The free leg, with the knee flexed, and the opposite arm must



The Broad Jump
(From AAHPER, Physical Education for High School Students. Washington: 1201 Sixteenth St., N. W., 1966. By permission.)

swing up vigorously to get a maximum transfer of momentum from these limbs to the body.

Landing—The legs extend out in front of the body upon landing. The forward momentum of the body should cause the jumper to fall forward.

Pole Vault

Approach—The approach may be as long as 150 feet. However, the approach should never be so long that the vaulter begins to tire at the vaulting box. The most critical factor in the approach is not the absolute speed, but rather the controllable speed. The vaulter must learn to relax during the last few running strides without slowing down.

"In order to determine the grip the new vaulter should use, place a line on the ground one foot to 18 inches from the runway edge of the box, stand the boy on the line, and have him raise his hands above his forehead. Place the end of the pole in the box and put the pole in his hands. This is a good height to hold the pole during the learning phases."[1]

In carrying the pole, the left hand usually acts as a fulcrum and the main force is applied with the right hand at the top of the pole. The vaulter should not grip the pole with the left hand too tightly. The distance between the hands may be up to three feet while carrying the pole.

Take-Off—In the pole plant the left hand slides toward the right hand. The head should be at a 45° angle and the right knee should be driven forward and up. In the spring-off the left arm should push the pole away and the back should be arched. The spring-off should be like that of a broad jumper as he is driving upward. It is very important that the left arm be kept stiff and the pole be kept ahead of the body.

Upon leaving the ground the left leg should be brought up quickly and knees and hips should be flexed quickly. The eyes should focus on the end of the pole and not on the crossbar. The head should remain back. Concentration should be on hip elevation at this time. As the feet are above the chin, begin the pull-up with a strong pull on the right arm.

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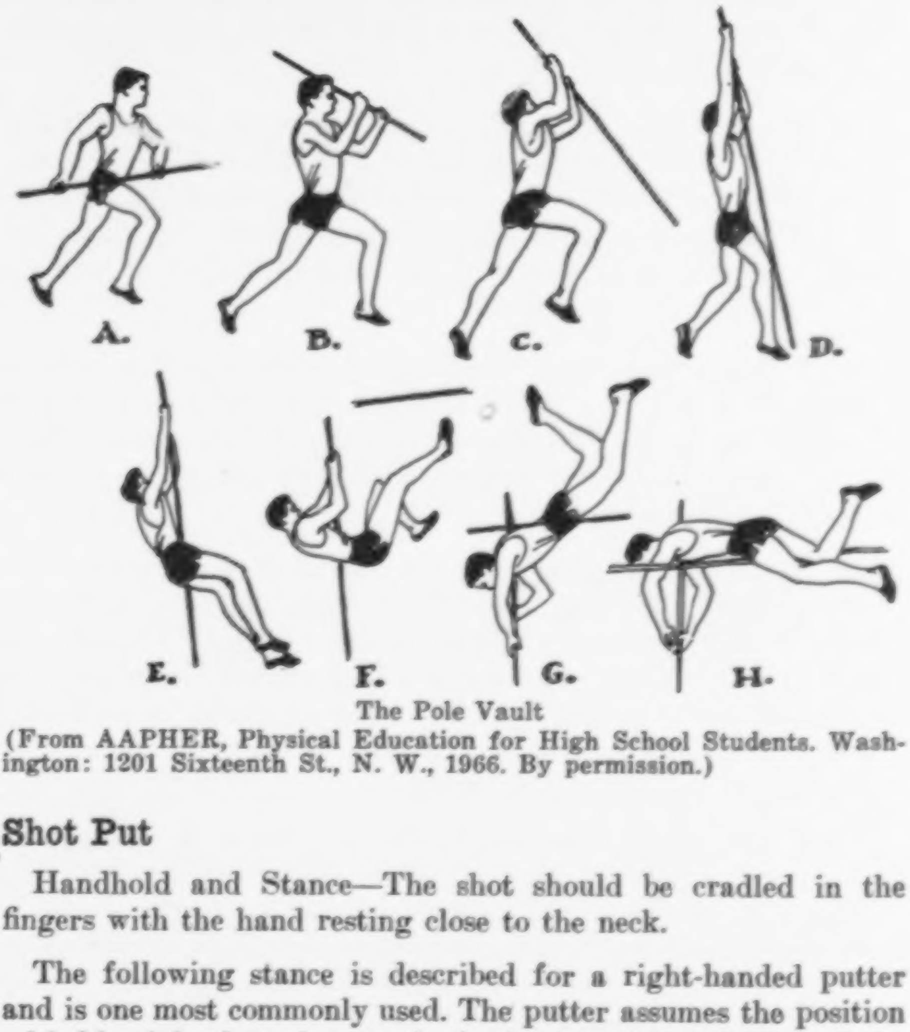
[1] Callish, Richard and Lester C. Wallack. *Teaching Track and Field.* The Interstate Printing and Publishers, Danville, Illinois: 1960, p. 71.

The thighs and knees are flexed during the pull-up and straightened before clearing the crossbar. The arm-pull and free-swing of the right leg are combined to complete the body turn which follows the pull-up.

The vaulter, who is now belly down, uses his final momentum to execute a push-up. At this point he lets go of the pole. The top hand is the last to leave the pole so the vaulter is able to keep the pole from going into the crossbar.

Landing—If the vault has been executed properly, the vaulter should land near the center of the pit. The vaulter should hit with his feet and roll backward on his buttocks.



The Pole Vault
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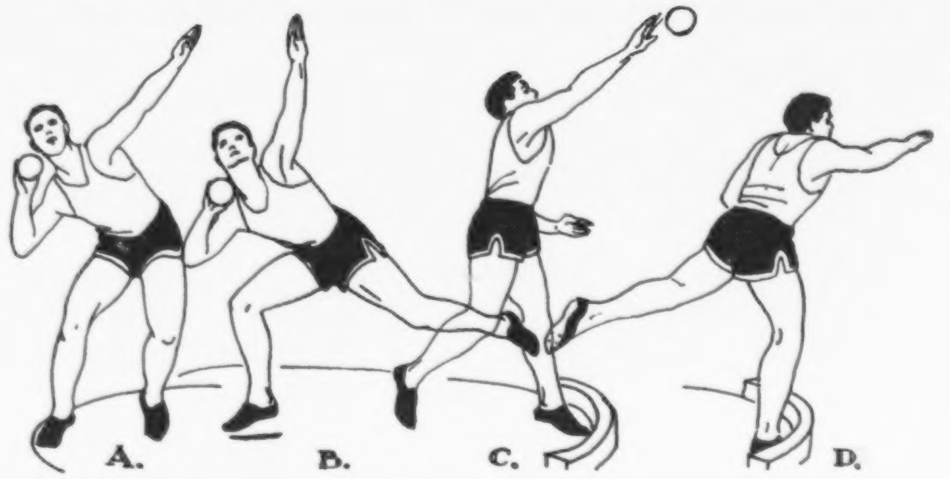
Shot Put

Handhold and Stance—The shot should be cradled in the fingers with the hand resting close to the neck.

The following stance is described for a right-handed putter and is one most commonly used. The putter assumes the position with his right foot close to the back edge of the circle and the left foot 10 to 16 inches away. The right leg supports most of the body weight and the knee is slightly bent. The left arm is extended outward to maintain balance.

Delivery and Release—The first move in the delivery is hopping on the right foot. The weight is then shifted to the left foot, bringing the left foot to the toeboard. As the weight shifts, the shot is pushed forward and upward, keeping the hand ahead of the elbow. The shot should be released with a snap of the wrist and fingers at an angle of approximately 45°.

Recovery—As the shot leaves the putter's hand, he should reverse onto his right foot to avoid stepping out of the circle.



The Shot Put
(From AAPHER, Physical Education for High School Students. Washington: 1201 Sixteenth St., N. W., 1966. By permission.)

Discus

Handhold and Stance—The discus is held against the palm of the hand with the first joint of each finger grasping the edge firmly.

The following stance is described for a right-handed thrower and is one of the most commonly used. The thrower assumes the position with his right foot close to the back edge of the circle and the left foot 16 to 20 inches away. The body weight is evenly distributed with knees slightly bent. The left arm is extended outward to maintain balance.

Delivery and Release—The thrower makes two or three preliminary swings, shifting the weight from foot to foot with the body coiling on the back-swing. As the discus is brought forward from the rear position in the last preliminary swing, the uncoiling motion begins with the shoulders pulling the discus around. The thrower pivots on the left foot and then on the right foot, making a complete turn of the body. It is not until the body faces the line of flight that the arm starts the throw. He then makes the final heave by whipping the fully extended arm forward and snapping the wrist. The discus leaves the hand slightly ahead of the shoulders at an angle of approximately 30°. The discus should leave the index finger last, spinning in a clockwise direction.

Recovery—As the discus leaves the thrower's hand, he should reverse onto his right foot to avoid stepping out of the circle.

Chapter
X

Swimming

Acquatic activities span a wide range of techniques from teaching beginners to water-skiing, from life-saving to competitive swimming.

One of the most significant developments in the sports world has been the phenomenal increase in the number of swimming pools. Two factors have contributed most to the growing popularity of swimming pools: a pool can be located to serve the needs of a particular neighborhood or community; and the swimming pool provides safe, sterile water for swimming.

Swimming may provide lasting satisfaction and pleasure as well as increased physical fitness. Improved posture and the strengthening of muscles weakened or crippled by disease may be brought about by a well-planned swimming program. There are mental hygiene values inherent in swimming. The student who overcomes fear of water may increase his self-confidence and learn skills which can be used in present and future leisure-time recreation.

Objectives

1. To teach students to become proficient in elementary swimming skills.
2. To teach students how to save their own lives and the lives of others in water.
3. To teach students to understand their limitations and abilities in the water.
4. To inculcate appreciation of the pleasures of water activities and their utility as leisure-time activities.

5. To challenge boys and girls with activities designed to meet their individual abilities and provide them with wholesome activity.
6. To increase physical fitness through vigorous participation in swimming activities.

Teaching Sequence

Skill instruction should be available on different levels. The following sequence is recommended.

Beginning

Pool safety
Adjustment to water
Rhythmic breathing
Tuck float
Prone and supine float with the aid of a buddy
Regaining standing position unaided from prone or supine float
Prone and back glides
Supine float and flutter kick
Jump into deep water
Dog paddle
Elementary back stroke
Finning
Sculling
Bobbing
Sitting dive
Kneeling dives
Standing dives
Change of position
Change of direction
Extension rescues

Intermediate

Review beginning skills
Pool safety
Front and back flutter kick
Treading
Scissors kick
Breast stroke kick
Front and back crawl
Side and breast stroke
Swimming underwater
Simple turns
Rescues with ring bouy
Basic competitive dives
Artificial respiration

Advanced

Review beginning and intermediate skills
Trudgen
Trudgen crawl
Inverted breast stroke
Side stroke
Butterfly
Tuck surface dive
Pike surface dive
Racing turns
Racing dives
Life saving jump
Backstroke flip turn
Fancy diving

Class Organization and Management

A swimming class should consist of not more than 25 students. The smaller the class, the more individual instruction can be given.

In organizing the class for instruction, the teacher should place the students so that everyone can hear his explanation, see the demonstration, have an opportunity to practice the skills learned, and be checked for achievement.

Swimming classes should be grouped according to the following classification:

Beginners: After a short period of instruction, he should achieve some degree of buoyancy and balance and should overcome his fear of the water. He should develop some degree of ability in self-propulsion.

Intermediate: An intermediate swimmer should be able to swim 50 yards. He should have some degree of confidence in any water situation and should begin to develop good form and coordination.

Advanced: An advanced student should be able to swim 100 yards. He should be ready for life saving, synchronized swimming, and to serve as a student leader.

In the absence of a school pool, every effort should be made to utilize community, YMCA or YWCA pools. When the instructor does not feel competent to teach swimming, he is encouraged to consult the local Red Cross Chapter for assistance by one of their water safety instructors.

Instructors may check for the possible inclusion of dry-land techniques for use in the gymnasium when schools are not accessible to a pool.

Teaching Aids:

Kickboards can be used to teach the beginners proper kicking techniques.

Swim fins are excellent aids for strengthening the kick.

Non-floating objects will aid in teaching such skills as breath holding and keeping the eyes open under water.

Nose clips and ear plugs may be used when needed.

Chapter
XI

Individual and Dual Sports

As a student leaves school, starts a life of his own, and becomes involved in the stresses and strains of society, opportunities for large group sports and recreation become less frequent. Thus the well-planned physical education program demands the inclusion and teaching of skills in the great variety of dual and individual activities.

Objectives:

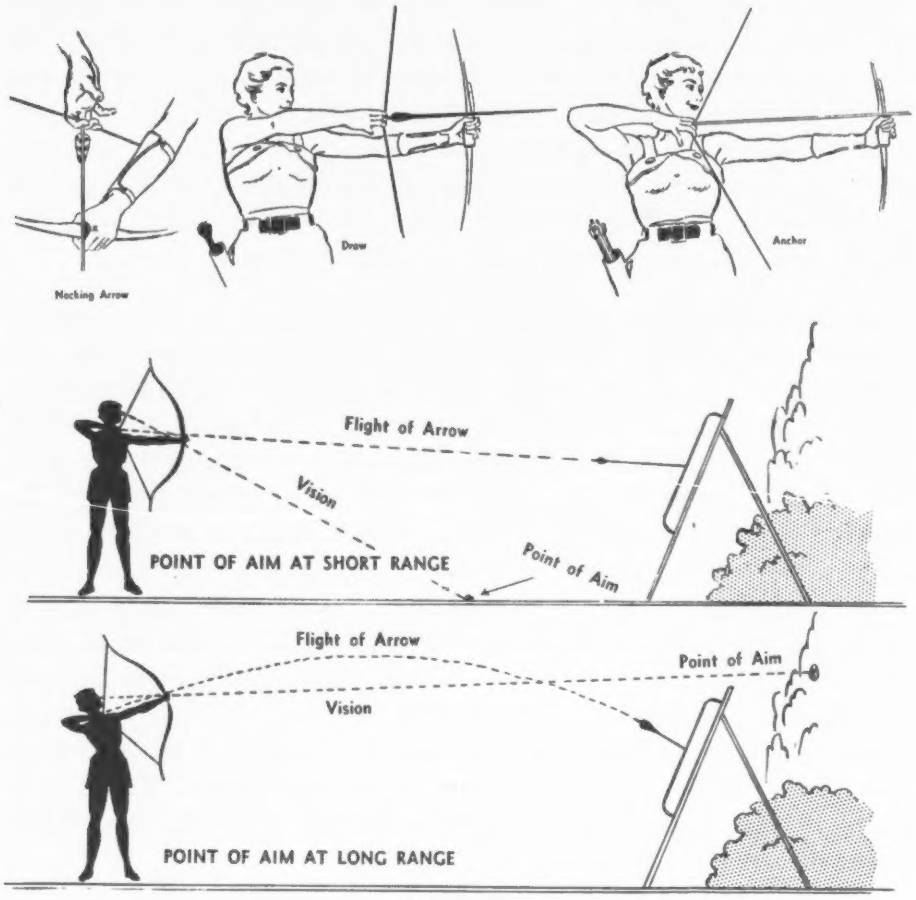
1. Develop neuromuscular skills.
2. Develop skills in games with carry-over value.
3. Help maintain good physical condition.
4. Instill good sportsmanship, courtesy, and etiquette.

Archery

Archery is a popular sport; people of all ages can participate for many years after they have left school. It is especially adaptable for use by physically handicapped students. Its popularity may be seen in the large number of organized archery clubs in all parts of the country. In addition to target practice, field shooting, and tournaments, many people are turning to the bow and arrow for hunting big and small game as well as for fishing.

Fundamental Skills

Stringing the bow—Hold the bow handle in left hand and let lower end rest against instep of left foot. (Do not push lower end of the bow into the ground). Feet apart; left elbow close to the body; heel of right hand on back of bow, with loop of string between thumb and forefinger. Bend bow by applying pressure with the left hand, allowing heel of right hand to slide along the bow until the loop is placed in the nock.



Shooting Technique

Stance—The feet are comfortably apart and astride the shooting line. The body is erect and facing at right angles to the target; the head is turned to see the target over the left shoulder.

Nocking the arrow—This is placing the arrow on the bow with the string in a small slit or nock at the end of the arrow. Hold the bow out horizontally with the left hand with the back of your hand up and the bowstring toward your body. With right hand, hold the arrow by the nock and place it across the serving of the string with the cock feather up; then with forefinger and thumb pull the nock back onto the string. Fingers are then placed around string, arrow resting lightly between first and second fingers. Three fingers should be hooked around string in the first joint and share the weight in drawing.

Drawing and Anchoring—The bow arm is extended toward the target and slightly bent at the elbow. Pull the string slowly back with the shoulder muscles until the anchor point is reached. It is important that the anchor point be the same for each shot. The hand is anchored against the jaw in a manner to allow the forefinger to rest under and against the chin. At full draw the arrow point is even with the back of the bow. The head is erect, chin up, body weight equally distributed, and the right arm and elbow are kept in a continuous line with the arrow. With the bow at full-draw and the shooting hand anchored to the jaw, the draw must be held until the act of aiming is completed.

Aiming, holding, releasing—Both eyes should be kept open if possible in aiming. Aiming in archery is different from the method used in aiming a gun because the arrow is drawn up to the chin and not the eye. For this reason the point of aim method is used in archery for beginners. The point of aim is the spot at which you look over the point of the arrow when aiming. To locate the point of aim, place small object (such as a white block of wood) on the ground in front of the target and shoot some arrows, aiming at this object. If shots are low, move point of aim toward target; if high, move toward archer. It's a matter of trial and error in locating the point of aim. At short ranges the rise in flight of the arrow is greater than the drop so it is necessary to aim under the target. At long ranges the drop is greater than the rise so it is necessary to aim above the target. There is a point blank range, usually between 40 and 60 yards, where the point of aim is at the *gold*—or "bull's eye."

Scoring—Scoring values are as follows: Gold or "Bull's Eye" —9 points; Red ring—7; Blue ring—3; White ring—1; arrow rebounding from target or going completely through—5 points. An arrow that touches the line between two rings counts as hitting the higher value.

Archery range—The distance of the lane depends upon the distance required to shoot the rounds selected and the width on the number of targets used. Lanes vary in size from 6-12 yards. There should be backstops for arrows behind the targets for safety and to save time when retrieving arrows.

Safety Measures

1. Always call "timber" before starting, as warning to others

who may not have cleared the shooting line or target area.

2. Always leave one member of your party standing in front of the target while you are looking for lost arrows as warning to others following on the course. If you are alone, leave the bow.
3. Never release an arrow when you cannot see where it will land; never "flight shoot" an arrow in the woods. Never shoot straight up.
4. Never shoot a broken arrow. Inspect each arrow carefully as you retrieve it.
5. Remember at all times that a bow and arrow is a deadly weapon, as dangerous as a gun, in the hands of an irresponsible person.
6. Never attempt to demonstrate your skill by using a person as a target, or by permitting another to hold the object at which you shoot.
7. Protect your sport by being careful and sure when you shoot.

Teaching Suggestions

1. If a limited number of bows and arrows are available, two students can team up to use one bow and a dozen arrows, one student acting as coach and the other as the pupil. They can help each other by observing the fundamentals taught by the instructor.

2. When the students have developed a fair amount of skill, tournaments and other minor archery contests may be organized to stimulate interest.

3. All equipment should be properly handled, racked, and stored.

Badminton

The game of badminton comes from England and is derived from a game called Poona that was played by British Army Officers stationed in India. Badminton is a popular sport, one which requires fast coordination and physical stamina.

Fundamental Skills

Grip—Hold the racket in the left hand so that the face of the racket is perpendicular to the floor. Grasp the racket with the right hand as though shaking hands with it. Some players like to extend the index finger slightly along the shaft. The grip should be taken at the end of the handle so that there will be no part protruding which might prevent wrist action. The thumb can be spread out along the handle so that there will be a "V" along the top of the racket with the thumb and index finger.

Forehand Stroke—The forehand stroke can be made with the above grip.

Backhand Stroke—The backhand stroke can be made with the same grip as indicated above. However, the face of the racket should be turned slightly to the right so that the normal swing with this grip will cause the face of the racket to be perpendicular to the floor.

Wrist Action—Wrist action in badminton is of paramount importance and should be taught from the very beginning. In making the forehand and backhand strokes, overhead smash, lob, etc., the arm swings and the wrist is held in a "cocked" position, so that just prior to contact with the shuttlecock, the wrist is brought into normal alignment with the arm. This wrist action gives power and control to all these strokes.

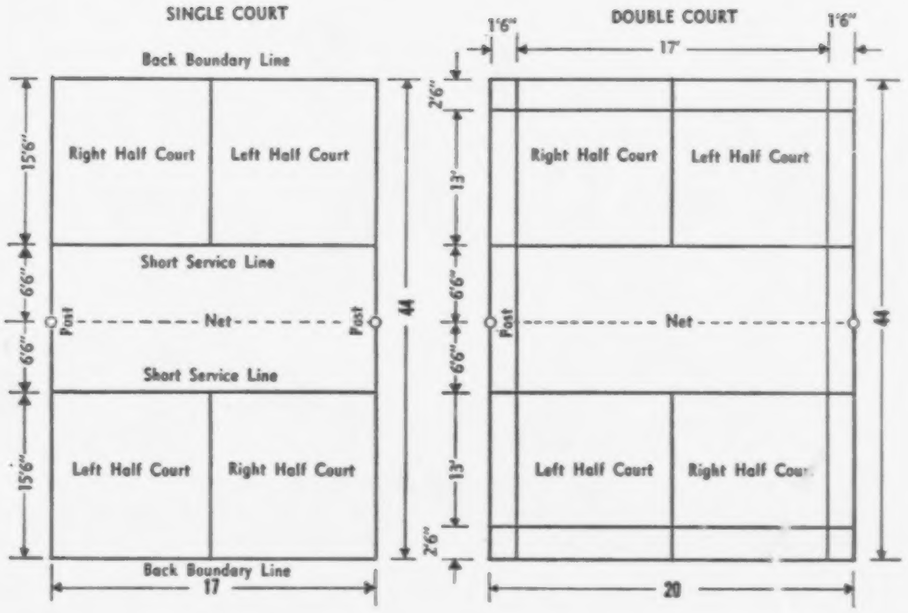
Smash—The grip for all these strokes is the same, depending on whether it is to be a forehand or backhand stroke. The smash is usually done when the shuttlecock is in an overhead position so that when contact is made with the shuttlecock, the arm is extended, forcing the shuttlecock into a downward flight.

Lob—The lob can be done in the same manner as the smash or with an underhand stroke. It is usually made so that the shuttlecock is forced to the rear of the opponent's court.

Drop Shots—This shot is so-called because the shuttlecock drops to the floor immediately after crossing the net. This can be done by using a great deal of wrist action and not much power. It usually can be done from any position on the court.

Drive Stroke—This is very similar to the smash, except that it is a very flat shot and is usually used to divert the opponent from one position to another.

Rules for playing badminton can be found in references listed in the appendices.



Badminton Courts

Bowling

Bowling dates back to 5200 B.C. The first game was played in America in 1623 in Manhattan by settlers from Holland.

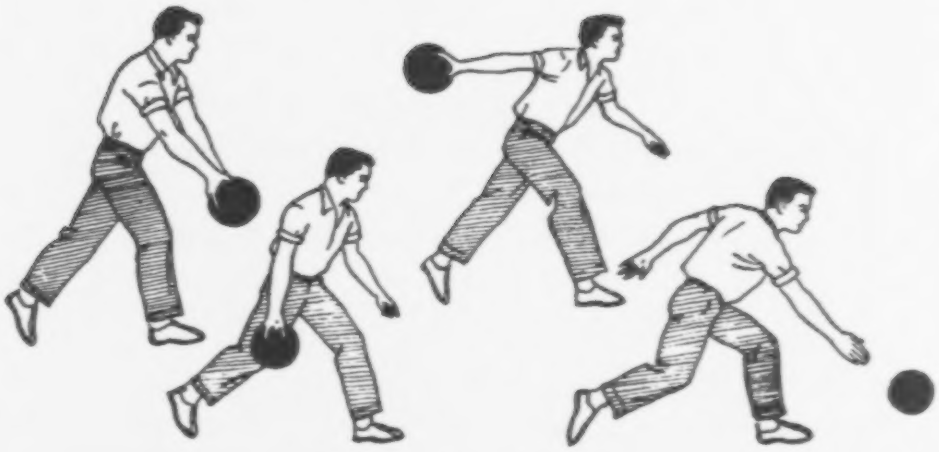
The American Bowling Congress was organized in 1895 to set up rules and regulations governing bowling. The Women's International Congress was organized in St. Louis in 1916. The American Junior Bowling Congress was organized in Chicago in 1940.

Bowling is one of America's most popular sports since all ages of men, women, and children participate, regardless of physical abilities.

For group teaching in the gym or recreation area, the gym-bowl instruction kit makes learning to bowl easy, fast, and fun.

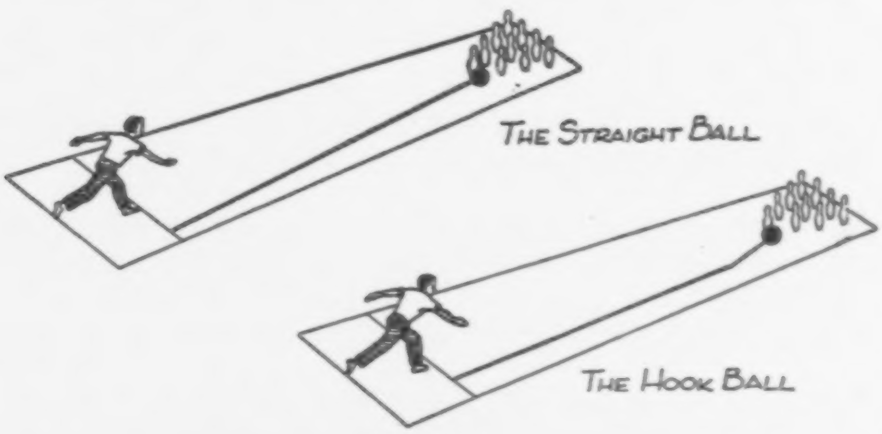
Fundamental Skills

Approach—There are several approaches used in bowling, namely, the three, four, and five step. The four-step approach probably suits more bowlers and is highly recommended.



The Four Step Approach
(From AAPHER, Physical Education for High School Students. Washington: 1201 Sixteenth St., N. W., 1966. By permission.)

Delivery—Coordinate the movements of the hands, arms, and shoulders with the movements of the hips, legs, and feet. Two main types of deliveries are the straight ball and the hook.



Deliveries
(From AAPHER, Physical Education for High School Students. Washington: 1201 Sixteenth St., N. W., 1966. By permission.)

Aiming—Two methods of aiming are used in bowling, namely, "headpin bowling" and "spot bowling." In the head-pin method, the eyes are concentrated on the 1-3 pocket throughout the approach, delivery, and follow-through. In the spot method, the ball is rolled along an imaginary line to the 1-3 pocket. This line is noted at the foul line and another spot 10 to 15 feet down the alley is another spot-check point for the ball to cross.

Strikes and Spares—Practice making strikes (knocking down all the pins with the first ball), and spares (knocking down all the pins with two balls).

For additional information on bowling consult the reference list since it is difficult to include all the aspects of bowling. Helpful hints, scoring, etiquette, selection and care of equipment, and safety measures are included in resource materials.

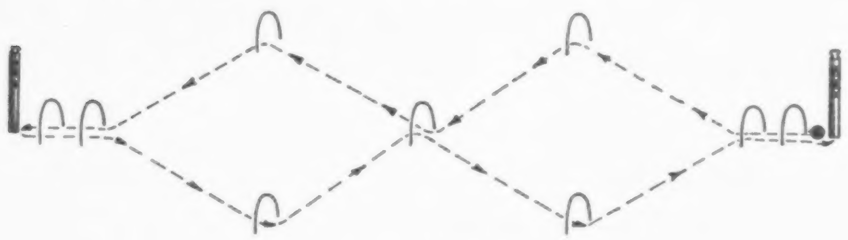
Croquet

The French originated the game of Paille-Maille in the thirteenth century. Since that time children and adults have enjoyed hitting wooden balls through hoops and at stakes. The game is now called croquet and is played by many families in their yards.

Fundamental Skills

1. Stance
2. Grip on mallet
3. Strokes
4. Roquet croquet

Court—Official tournament court is 70′ x 20′, but may be shortened to fit the back-yard or area. For wicket layout and pattern of play, see diagram below.



Croquet Court

Game Procedure

1. Players take turns according to the sequence of colors on the croquet post.
2. The order of play through the wickets is as diagrammed above.
3. A player receives an extra turn for going through a wicket or hitting a stake.

4. Hitting an opponent's ball awards:
    - a. A hit rolling with opponent's ball plus another stroke, or
    - b. Driving the opponent's ball and one hit of own ball, or
    - c. Two strokes of own ball a mallet's head length from opponent's ball.
5. A player is "dead" on an opponent's ball after hitting it and until his ball passes through a wicket.
6. The player completing the course first is the winner.

Deck Tennis

Deck tennis was originally played on the deck of a ship and it is also known as quoit tennis, tenequoit, and ring tennis. The Recreation Games and Sports Committee of the National Section for Girls' and Women's Sports adopted for deck tennis rules that are in keeping with the playing rules of tennis as adopted by the United States Lawn Tennis Association.

Number of players—2 for singles, 4 for doubles, any number for mass play.

Playing space—18 feet by 40 feet.

Equipment—net or rope and rubber ring.

Fundamental Skills

1. Serving
2. Receiving ring
    - a. Hand gives with the catch
    - b. Grip ring between thumb and first finger
    - c. Catch equally with either hand
3. Throwing
4. Court play
    - a. A fast, low serve
    - b. Speed of returns changed
    - c. Short drop-shots
    - d. Placement of ring

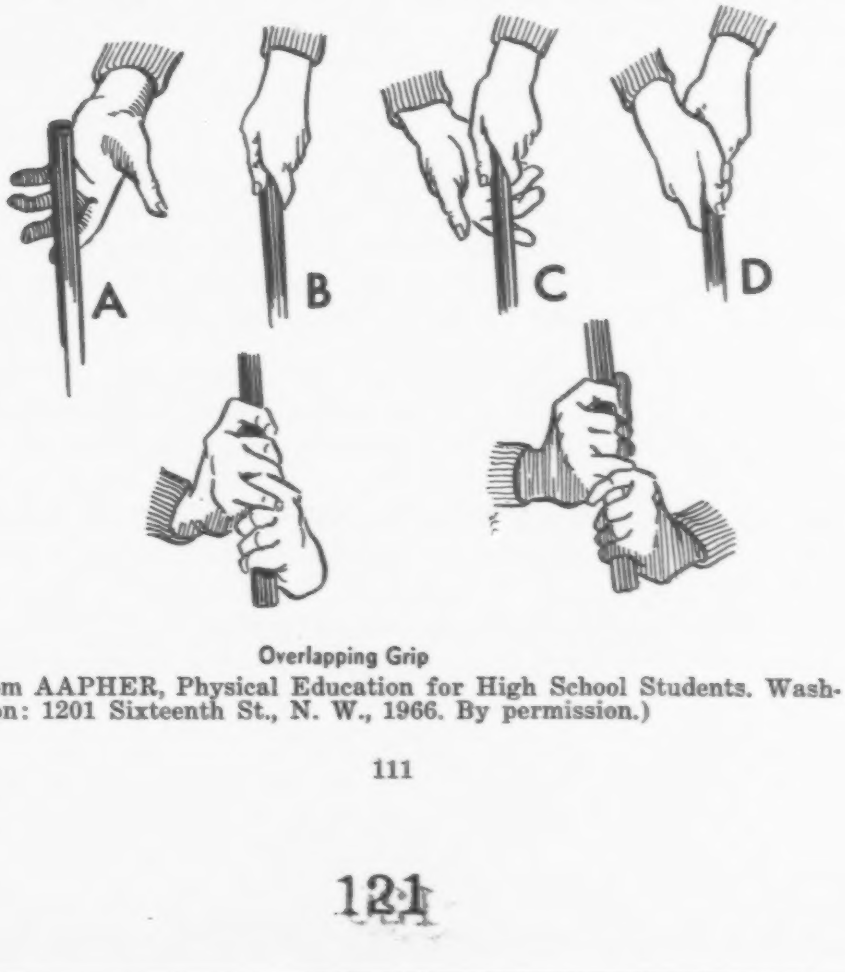
Golf

The demand for the addition of golf instruction to the physical education curriculum is being made by more South Carolina high schools because of the increasing popularity of the game and availability of golf courses. It is a game which continues to challenge players of all degrees of skill and experience, all ages, and both sexes. The game may be played by persons whose activity has been limited because of physical restrictions.

Fundamental Skills

The Grip—The three types of grips usually used by golfers are the baseball, overlapping or Vardon, and the interlocking. A player with a weak left hand, small hands, or short fingers may find the baseball or interlocking grip more comfortable. The overlapping grip is more generally used as it enables the golfer to achieve greater coordination of the hands.

In the overlapping grip, the left hand is placed on the shaft so that the handle extends diagonally from the first and second joints of the forefinger across the palm of the hand. The hand is well over the shaft with the left thumb to the right of center when looking down the shaft. The fingers grip the shaft firmly.



Overlapping Grip

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The right hand is placed on the handle with the center of the palm resting over the thumb of the left hand. The little finger overlaps the forefinger of the left hand, while the right thumb extends diagonally across the shaft with the forefinger well down the shaft and hooking onto the shaft.

The "V" formed by the thumb and forefinger of both hands should point to the right shoulder of right-handed players.

The Stance—The club is soled behind the ball with the club face perpendicular to the line of flight in assuming the stance. With the club soled, the length of the club and arm should give the proper distance to stand from the ball. The knees should be flexed, toes pointed outward slightly, and the weight evenly divided between the two feet, with most of the weight back toward the heels.

Three are three stances:

a. Square — toes parallel to the line of flight.
b. Open — left foot drawn back from the line of flight.
c. Closed — right foot drawn back from the line of flight.

The feet are parallel and about shoulder-width apart for a full swing. For shorter swings, the feet are closer together, with a more open stance.

The Swing

Waggle — The waggle consists of one or more short, loose, back and forth movements with the club which allows the clubhead to pass either 12 to 14 inches from the ball or to pass directly over the ball. Its purpose is to relax the golfer and at the same time give him a feeling for the rhythm of the swing.

Backswing — The backswing usually begins with a slight forward press to emphasize the point of contact, followed by moving the clubhead, hands, and arms backward in unison. The left arm is held straight but not rigid. The clubhead is carried back by rotating the body and shifting the weight to the right side. The left heel is just off the ground and the left knee is bent toward the right. The wrists begin to cock as the club reaches the waist line. The club is brought over the shoulder no further than a horizontal position with the long clubs. The shorter clubs require a shorter swing. To insure accuracy, the head remains fixed and the eyes are kept on the back of the ball during the entire swing.

Apex—At the top of the backswing: (1) the woods are parallel to the ground, (2) the irons vary with different length clubs: No. 5 about a 45-degree angle and Nos. 7 and 8 about a 90-degree angle.

Downswing—The downswing starts with a turn of the hips to the left, bringing the right shoulder and hands down toward the ball. The head must remain in a fixed position or the shot will be spoiled. The right elbow must be kept close to the body and the wrists are held cocked until the hands reach the level of the waist. Then the wrists uncock naturally as the club follows the arc to the ball.

Impact—At the moment of impact, both arms are straight, the right knee and side relaxed, and the head still in a fixed position.

Follow-through—The momentum of the swing should carry the club along the intended flight with a rotation of the body to permit a complete follow-through of the hands and arms. The player should see the club contact the ball before looking up to see the flight of the ball.

Putting—The reverse overlap grip is most frequently used for putting. In this grip, the forefinger of the left hand overlaps the little finger of the right hand. The thumbs of both hands run straight down the shaft top. For putting, the following general principles hold:

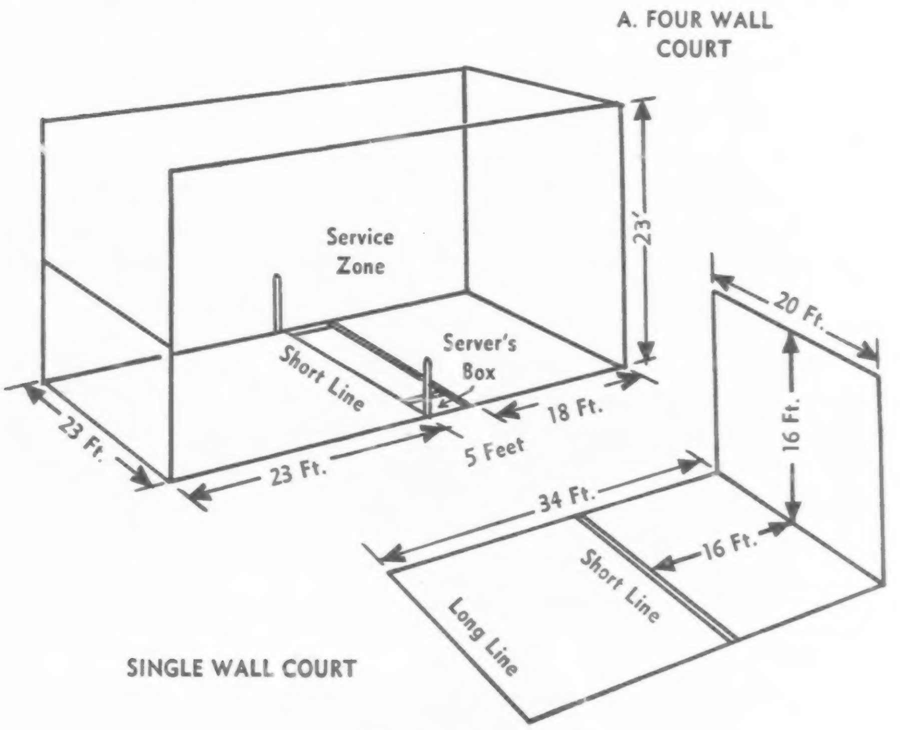
a. A fairly light grip is recommended.
b. The stance is easy and relaxed.
c. The head is well over the ball.
d. The club face is perpendicular to the line of flight.
e. The backswing and follow-through should keep the putter head square to the line the ball is to travel.
f. The eyes must see the putter head strike the back of the ball on each putt.

Handball

The game is played on either a one-wall, three-wall, or four-wall court by two, three, or four players. The game with two players is known as singles; with four players it is known as doubles. The three-handed game is called "cut throat", and although not an official game, it may be more strenuous than singles. It differs from the other two games in that the one serving is playing the other two. The server plays as in singles, the receivers play as in doubles. Each man scores only when he is serving.

The object of the game is to strike the ball against a wall with leather gloves and try to make it impossible for the other side to hit the ball against the wall before it has bounced twice.

The dimensions and names of the various lines and areas in the court are shown below.



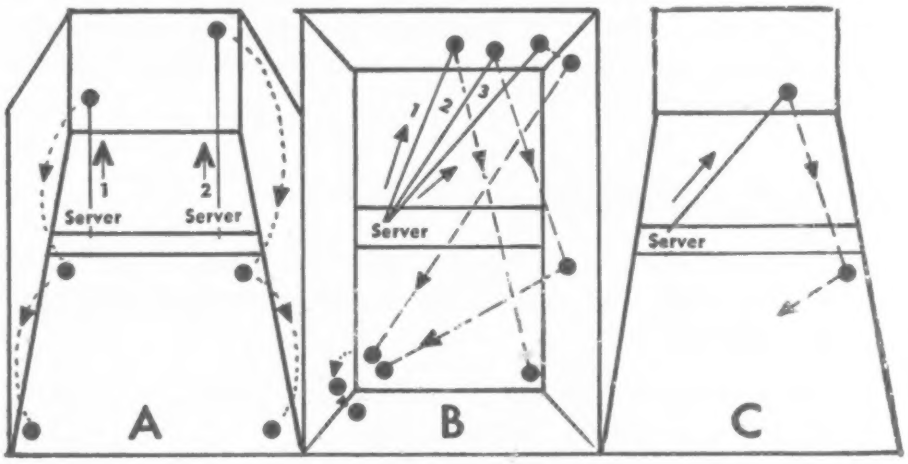
Single Wall Court
Court Dimensions (AAU)
(YMCA court dimensions are 20x20x40 feet)
(From AAPHER, Physical Education for High School Students. Washington: 1201 Sixteenth St., N. W., 1966. By permission.)

Description of Game

The game is started by the server who drops the ball to the floor in the service zone and hits it on the bounce against the front wall so that it returns and hits the floor anywhere between the short line and the long line. If the server completely misses the ball, he loses the serve. Both feet must be within the service area while serving. If this rule is violated, a fault is called which counts as a short. The ball must hit the front wall before hitting any other wall, and it must return over the short line to be a good serve. Two shorts put the server out.

Fundamental Skills

Serve—Several basic serves are used. The most common serves are a low serve down the side wall (A below), a high lob close to either sidewall below (A-2 below), a sharp angle serve lighting deep in the court as in (B-1,2,3), and a lower sharp angle serve hitting just over the short line (C below).



Basic Serves

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Return—The strokes used in the return are essentially the same as the serve except that the ball is coming toward the receiver rapidly, and correct position must be taken by the player to receive the ball.

Court Position—It is best to occupy a position immediately in front of your opponent and approximately in the middle of the court in singles (or in the middle of your half of the court in doubles).

Footwork—Maintain the same position of the feet and body and action of the arms as used in throwing a baseball or striking a tennis ball. Proper stance and court position are important in making good shots since good footwork is the key to the techniques.

Horseshoe Pitching

Horseshoe pitching originated at least two centuries before the Christian Era in Western Asia and Eastern Europe. Tha National Horseshoe Pitchers' Association was organized in 1921.

Fundamental Skills

1. Grip on shoe
2. Stance
3. Swing
4. Release
5. Follow-through

Court—Two stakes set 30′ apart for women and 40′ for men in a 6′ square filled with 6″ of a special clay. One inch in diameter iron or steel stakes extending 14″ above surface with a 3″ incline toward opposite stake.

Description of Game

1. Choice of pitch at the beginning of the game is decided by the toss of a coin. In successive games the loser will have first pitch.
2. The game is divided into 2 innings. The pitching of 2 shoes by each side constitutes an inning.
3. A shoe must be within 6″ of the stake to score. Closest shoe to stake scores 1 point. One ringer counts 3 points. Two shoes closer than any opponent's shoe scores 2 points. Side with 2 ringers for opponents' 1 scores 3 points. All equals count as a tie and no points are scored. When each side has a ringer, the next closest shoe scores 1 point if within 6″ of the stake. A leaning shoe has no value over one touching the stake. A game consists of 50 points.
4. A ringer is declared when a shoe encircles the stake so that a straight line can be drawn between the toes of the shoe without touching the stake. A leaner is declared when a shoe is in an upright position and is supported by leaning against the stake.
5. In doubles or team play the shoes are pitched from one box to the other by alternate partners.

PADDLE TENNIS

Paddle tennis was invented about four decades ago by Frank P. Beal. It is similar to lawn tennis, as the rules and scoring are the same.

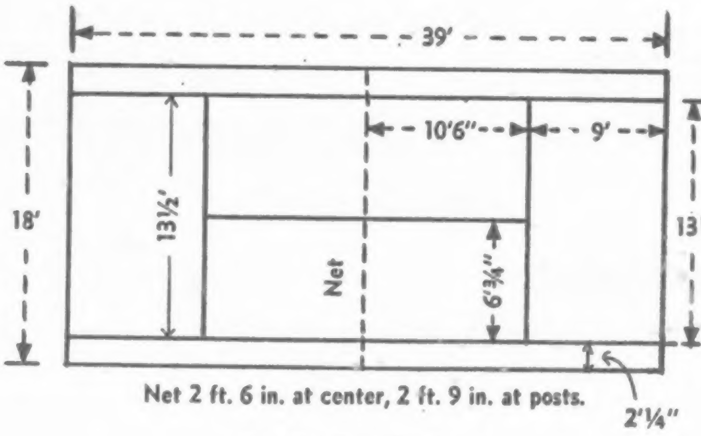
Number of players — 2 or 4.

Playing space — 18 feet by 39 feet.

Equipment. Two sponge rubber balls or tennis balls, wooden paddles, and a net.

Fundamental Skills

1. Grip
2. Stance and footwork
3. Strokes
4. Service
5. Court Strategy



Net 2 ft. 6 in. at center, 2 ft. 9 in. at posts.

Paddle Tennis Court

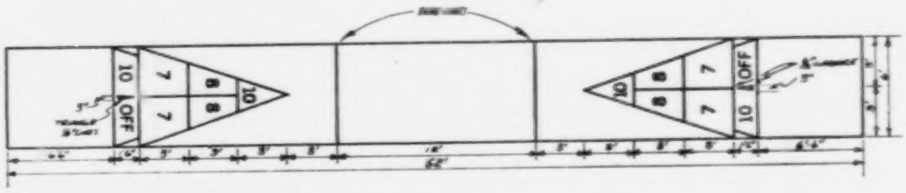
SHUFFLEBOARD

Shuffleboard is a semi-active game that can be played by all ages. It is very popular as an indoor or outdoor activity.

Shuffleboard is played by placing the "cue" behind the "disc" and shoving the disc down the court towards the section containing the numbers of 10-8-7. Discs must not touch any part of the lines. Discs are usually red and green and are shoved alternately down the floor. Discs remaining with the sections numbered 10, 8 or 7 are scored, while those in the 10-off section deduct 10 points from the score.

Fundamental Skills

1. Strokes
   a. Aim
   b. Approach
   c. Stance
   d. Shot
   e. Follow-through
2. Techniques for Playing
   a. Cross pilot
   b. Tampo pilot
3. Shots for strategy
   a. Hide and protect
   b. Carom shots



Shuffleboard Court

TABLE TENNIS

Table tennis is a popular form of recreation in school, in homes, and in clubs. It is a game that can be played vigorously or leisurely. The rules are governed and published by the United States Table Tennis Association.

Number of players — 2 or 4

Playing space —table top 5 feet by 9 feet, placed 30 inches from the floor.

Equipment — 5 feet by 9 feet, 5/8″ plywood supported by wooden horses or collapsible commercial table; two adjustable posts; net 66 inches long, with the top edge 6¾″ from the table top; wooden paddles for each player; celluloid ball.

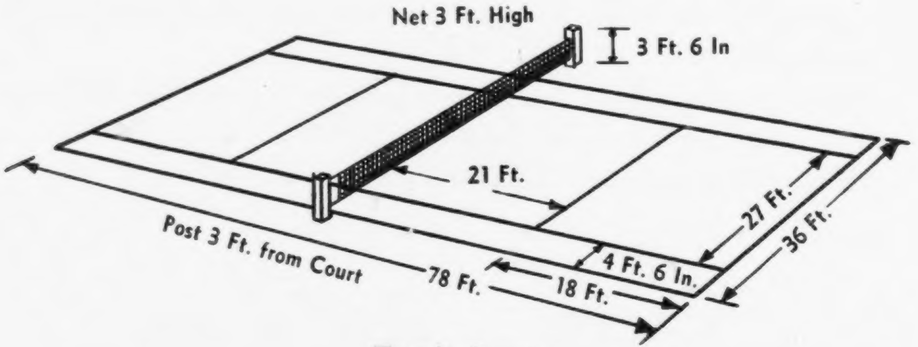
Fundamental Skills

1. Grip
2. Stance
3. Strokes
4. Court play

TENNIS

Tennis is a game that has appealed to the young and old of both sexes. Many consider the doubles game to be one of the best forms of co-recreational activities. The game may be played merely as a mild form of exercise or so strenuously that it taxes one's endurance and strength to the very limit. Coordination, speed, agility, and endurance can be developed and are needed to play a good game of tennis.

This game is played by two or four players. The opponents face each other with the net separating them. One of the players starts the game by serving the ball from behind the right side of his baseline to the right service court of his opponent. The receiver returns the ball after the first bounce but before the second bounce. If the server fails to put the ball in play on the first ball, he may try a second time before losing a point. The player hitting the ball off the court or into the net or failing to return the ball before it has bounced twiice loses the point. After the first point, the server serves the ball to the left service court. The server serves the entire game. The point system is as follows: love - 15 - 30 - 40 - game. Once the score is tied at 40-40 it is called "deuce" and to win the game one player or team must win two consecutive points.



Tennis Court
(From AAPHER, *Physical Education for High School Students.* 1201 Sixteenth Street, N. W., Washington, D. C., 1966. By permission.)

Fundamental Skills

1- *Footwork*—This skill must be developed to play good tennis because good footwork adds power, proper balance, and ball control.

Teaching hint: Use light running steps with frequent stops, starts, and turns. Use drills to aid with starts and stops.

2. *Forehand Drive*—This stroke is used to return balls coming to the player's right. The return is low and long.

Grip—With the racket head perpendicular to the ground, "shake hands with the racket."

Swing—The racket head is kept high on the backswing, on the forward swing, and on the follow-through. The ball is contacted diagonally forward from the left foot.

Stance and body balance—The left side is toward the net throughout the stroke. The body weight shifts from right to left as the racket swings from right to left.

3. *Backhand Drive*—This stroke is used to return balls coming to the player's left. The return is low and long.

Grip—From the forehand grip turn the hand slightly to the left.

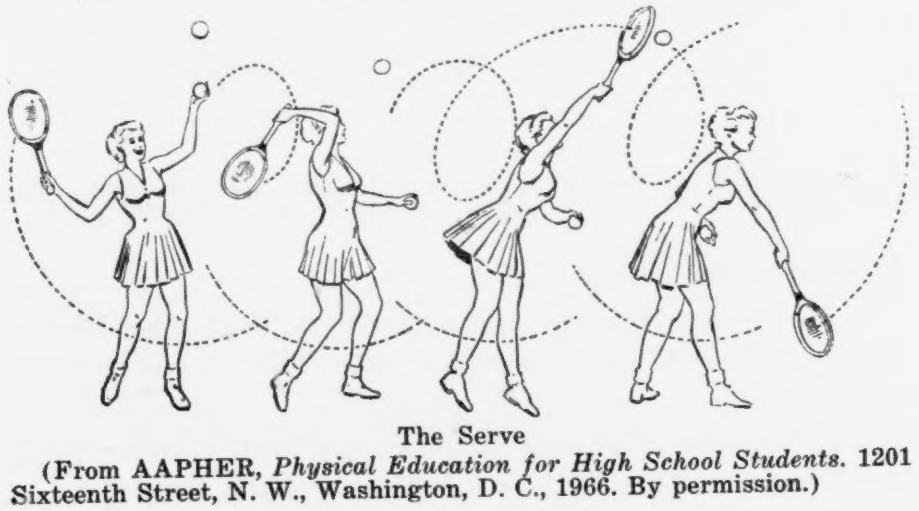
Swing—The racket head swings in an arc from the left shoulder to the waist to the right shoulder. The ball is contacted diagonally forward from the right foot.

Stance and body balance—The right side is toward the net throughout the stroke. The weight shifts from side to side with the racket swing.

4. *Service*—This stroke is used to put the ball into play at the beginning of each point. Tossing is a basic skill because the player must toss the ball into the air to hit it.

Teaching hint: Have the student practice tossing the ball into a foot circle in which he is standing.

Swing—The racket swings from a position pointing at the ser-



The Serve

(From AAPHER, *Physical Education for High School Students.* 1201 Sixteenth Street, N. W., Washington, D. C., 1966. By permission.)

vice court to a position behind the right shoulder. From here it is raised over the left shoulder where it contacts the ball. The follow-through is downward past the left knee.

Stance and body balance—The left foot is just behind the baseline at the center mark. The left shoulder points toward the service court. As in all strokes, the body weight shifts with the racket.

5. *Volley*—This stroke is most often used at the net. It is a stroke in which the ball is played before it bounces. It may be forehand or backhand.

Grip—Halfway between forehand and backhand.

Swing—There is no backswing. For low balls the follow-through is upward; for high balls the follow-through is downward.

Stance—The player faces the net. There is no backward step since there is no backswing. Step as for forehand and backhand.

6. *Lob*—The lob is a forehand or backhand stroke which sends the ball high and deep. It is used to hit over the opponent's head or to gain time for the stroker.

Chapter XII

Physical Education For the Exceptional Student

In our democratic society education must assume a responsibility to help all students develop to their fullest potential. South Carolina's education system subscribes to this philosophy. Consequently, the school has the obligation to provide physical education for the exceptional student regardless of his condition according to the law as stated in Chapter IV.

It has been estimated that between 5 and 10 per cent of school-age children need special education courses, and approximately 3 per cent of these will need to be enrolled in special classes. Conditions which most often prevent a student from participating in the regular physical education program may be categorized as: 1) visual handicaps, 2) hearing handicaps, 3) orthopedic handicaps, 4) cardio-vascular conditions, 5) poor body mechanics, and 6) other traumatic, pathological and congenital conditions. Needs of student requiring special physical education usually fall into one or more of these groups; 1) those needing to adapt to a permanent condition, 2) those seeking to rehabilitate a physical disability, 3) those requiring limited activity and those recommended for a developmental program.[1]

Of considerable current interest has been the emphasis on recreation and physical education for the mentally retarded. These programs can make important contributions to the total growth and development of the retarded. The goal of physical education for the retarded is to help individual become better prepared physically, mentally, emotionally, and socially to take his place in society as a self-substaining adult who is capable of living the fullest life possible within his limitations.[2]

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[1] Logan, Gene, *Adaption of Muscular Activity*. Belmont, California: The Wadsworth Publishing Co., Inc., 1965, p. 7.

Basic play and recreation needs and interests of the mentally handicapped are not radically different, but they differ in degree and in method of expression. Many skills learned spontaneously by other children must be taught to retarded children.[3]

To work successfully in an adapted program a teacher must possess certain traits in addition to those expected of any teacher. He must have adequate professional education to understand and implement the recommendations of the physician; he must have a sincere interest in the handicapped children and be able to establish rapport with them, and he must have abundant patience.

Objectives

Logan[4] feels that the general objective of an adapted physical education program is "to provide opportunities for all students to acquire the maximum physiological, psychological, and sociological development of which they are capable." He considers the following specific objectives:

1. Protect the student from further aggravation by planning a program within his limitations.
2. Help the student understand and accept his limitations.
3. Correct or alleviate his problem where possible.
4. Develop the best possible organic vigor within his ability.
5. Develop skill in sports and games suitable to his limitations.
6. Develop his knowledge and appreciation of good body mechanics.
7. Help him make social and emotional adjustments to problems caused by his disability.
8. Help him gain security through his ability to meet the physical demands of daily living.

IDENTIFYING THE HANDICAPPED STUDENT

A successful adapted program necessitates identifying those students who can best be served through such a program. Every student should have a periodic medical examination and physical education assignments and restrictions should be based on these findings. It is desirable for the physician to make specific recommendations concerning the activities in which the student may participate. Students with minor handicaps can take part in the regular program with appropriate adaptations, provided enrollment does not exceed 40 students in any class.

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[2] Council for Exceptional Children and AAHPER. *Recreational and Physical Activity for Mentally Retarded.* Washington: AAHPER 1966, p. 13.

[3] Ibid., p. 28.

[4] Logan, op. cit., p. 7.

PLANNING FOR THE HANDICAPPED STUDENT

In organizing an adaptive physical education program, it is important for school personnel to identify policies and procedures in a cooperative approach with local physicians and parents.

Chart VIII presents some of the more common conditions of exceptional students with which the teacher will be concerned.

EVALUATION OF STUDENT PROGRESS

Two main purposes are served by evaluation of the individual's progress. First is the student's achievement in terms of improvement. Second is the provision of a grade in physical education.

The pattern of grading in an adapted program should follow that established for the general program. Ideally, it should be supplemented by the use of objective measures of function, range of motion and strength, plus results of individual conferences, special consultations, and reports from referrals. Inclusion of suitable skill tests, knowledge tests, and social development ratings from the general program will add to the evaluation. The well-trained teacher may also find the use of subjective appraisal valuable.[5]

Where evaluation must be transposed into a single grade, the teacher is confronted with the problem of whether to grade in terms of group standards or in terms of students' limitations. Grading the handicapped student on an absolute scale is less desirable for the adapted program than marking on the basis of individual limitations and relative capacities.[6] The teacher, then, should consider each student in terms of how well he accomplishes the particular goals established for him on the basis of his potential.

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[5] Daniels, Arthur S. and Evelyn A. Davies, *Adapted Physical Education.* New York: Harper & Row, Publishers, 1965, pp. 435-436.

[6] Ibid., pp. 436-437.

CHART VIII
PLANNING FOR THE HANDICAPPED STUDENT IN PHYSICAL EDUCATION

Exceptional Condition	Factors With Implications for Physical Education	Guides for Planning Physical Education
Cardiac—May be functional (innocent) or organic (heart defect)	Functional cases may develop into organic cases if proper care is not taken	1. Observe closely. 2. Have frequent medical re-examinations and reports. 3. Secure cooperation of parents in following good rules of health—diet, rest, play, understanding, medical care, etc.
1. Active condition	1. Frequent pain and discomfort 2. Fever in some cases 3. Low resistance to infections 4. Low vitality and interest	1. Youth should not be in school.
2. Convalescent state	1. Aches in joints 2. Tires easily 3. Shortness of breath 4. Emotional or adjustment problems	1. Restricted activity and short school day. 2. Frequent rest, as indicated by discomforts. 3. Encouragement to join in play. 4. Gradual return to normal activity .
3. Inactive state	1. Same as above, if any	1. Observe carefully; if changes seek immediate medical recommendations. 2. Most cases can participate fully in the class activities. Adapt the activity to the child by allowing more rest periods, playing in less active positions, emphasizing accuracy in performance rather than speed and endurance. 3. Activities recommeneded are balance stunts, acquatics, outdoor education, bicycling, bowling, rhythms (of short duration), games which involve throwing, kicking, or batting for accuracy, and which allow short runs with opportunity for rest. 4. Avoid highly competitive activities.

Reprinted from Guide for Teaching Physical Education, Guides 1 - 6. Columbia, S. C., State Department of Education, 1966, pp. 38-43.

Exceptional Condition	Factors With Implications for Physical Education	Guides for Planning Physical Education
Orthopedic – These would involve missing, paralyzed, or malformed arms and/or legs. The specific area involved would determine the limitation.		
1. One arm	1. Balance is affected 2. May have superior strength in remaining arm 3. Where a partial limb remains, there may be irritation 4. Emotional involvement	1. If the child has a prothesis (artificial limb), there may be no problem and the child participates in all activities. 2. If recent loss, give encouragement and chance to succeed. 3. Encourage development of balance through stunts (gymnastics). 4. Give extra protection where safe performance demands high degree of balance as in bicycling, aquatics, apparatus (ladders, ropes, etc.), jumping, and landing. 5. Insure protection of sensitive stump in activities where contact might occur–ball handling activities, dual stunts, pyramids, striking activities. 6. Help classmates understand and accept the child. 7. Activities which are particularly good are running, dodging, aquatics, ryhthms, leg strength stunts, single arm throwing (for distance and accuracy), bowling.
2. Both arms	1. Balance greatly impaired 2. 3 and 4 above	1. If prothesis is present, limitations are decreased. 2. See sections 2 through 6 above. 3. Activities which are particularly good are running, dodging leg strength stunts, rhythms, balance activities (with protection).
3. One leg	1. Restricted mobility 2. May have superior strength in remaining leg 3. Where partial limb remains, there may be some irritation 4. Emotional involvement 5. Foot balance affected	1. If prothesis is present, there may be little limitation. 2. Provide protection as needed (see above). 3. Give group security (see above). 4. Adapt activities to limitations of child by allowing someone else to run for child, placing child in position which requires less speed. 5. Activities which are particularly good are bowling, bicycling, throwing, batting, stunts using arms and shoulders, outdoor education, aquatics, rhythms in which speed of movement is not a factor.
4. Both legs	1. 1, 2, 3, 4, 5 above with greater limitations	1 See sections 1 through 4 above. 2. Activities which are particularly good are bowling, throwing, catching, striking stunts, gymnastics utilizing arms and shoulder strength, acquatics, outdoor education, activities of moderate speed which encourage the development of balance in the standing position.

Exceptional Condition	Factors With Implications for Physical Education	Guides for Planning Physical Education
Visual – Partial or total. The degree of vision will determine the limitation.		
1. Total loss of vision	1. Tends to be overweight due to lack of freedom in moving about 2. Frequent accidents, falls, bruises, abrasions, etc. 3. Balance is affected 4. No emotional problems unless brought on by attitude of associates	1. Great need for vigorous activities and diet. 2. Provide protection where needed. 3. Help classmates accept child. 4. In teaching, move body parts manually to give the child the "feel" of the correct way to perform skills. 5. Indicate direction by use of sounds on targets. 6. Activities which are particularly good are track and field, aquatics, outdoor education, bowling, stationary stunts, rhythms, ball-handling activities using balls with bells inside, strength stunts and skills.
2. Partial loss of vision	1. Same as 1 through 4 above	1. Same as above. 2. If glasses are worn, require plastic guards at all times. 3. Additional activities would include those in which stationary or slow-moving targets are involved or where the game can be adapted to the child's limitation.
Hearing–(total or partial)	1. Balance is impaired 2. Emotional problems are frequent 3. Child may appear to be uncooperative or careless	1. Need activities which develop balance. 2. Help classmates understand and accept child. 3. Use patience at all times. 4. If hearing aid is used, encourage constant use and give protection as needed. 5. Give directions when child is facing teacher and in normal head-upright position. 6. Use visual aids frequently. 7. Give child responsibilities. 8. Activities which are particularly good are balance stunts and no limitations in others.
Malnutrition – This may be overweight or underweight. Overweight is far more serious than underweight.		
1. Underweight	1. Tires easily 2. May be irritable 3. Susceptible to infections	1. Seek medical advice on cause of condition. 2. Seek home cooperation in attacking cause. 3. Secure cooperation of parents in promoting good health habits–rest, diet, play. 4. Needs frequent rest. 5. Needs to be taught how to relax to conserve strength. 6. Protect from infections. 7. No limitations in activities except as previously indicated.

Exceptional Condition	Factors With Implications for Physical Education	Guides for Planning Physical Education
2. Overweight	1. Tires easily 2. Younger children usually have happy disposition, but older ones may develop social problems 3. Lacking in speed, agility, and endurance 4. Appears to have strength but cannot use it due to bulk	1. Medical advice is urgently needed. 2. Factor causing overweight must be removed. 3. If there is no organic factor involved, weight can be controlled by proper balance between food intake and work output or exercise. 4. Help child gain an understanding of how his abilities are limited by his weight. 5. Encourage vigorous physical activity at school and at home.
Hay Fever and Asthma	These are treated together because they involve breathing problems. 1. Discomfort 2. Difficulty in getting breath 3. Cause may or may not be known 4. Often increased by emotional tensions.	1. Discontinue play when it causes discomfort. 2. Give frequent rest periods. 3. If cause is known and can be controlled, as in the case of dust or pollens, use a mask or play in less affected area. 4. Avoid highly competitive situations. 5. With a few exceptions, such cases can participate in normal activities.
Epilepsy	Types of epilepsy range from a mild twitching to a severe seizure or unconsciousness.	1. Read medical report carefully and ask for information relative to severity and frequency of attacks, prescribed medication, and cause. 2. Know first aid necessary. Keep victim lying on back; do not restrain movements; put soft object in mouth to protect tongue; keep child quiet after attack. 3. Avoid situations which tend to cause attacks. 4. Avoid activities which involve climbing and moving apparatus. 5. Avoid contact activities. 6. Avoid highly emotional or competitive situations. 7. Except as indicated in 4, 5, 6, the normal activities can be performed.
Diabetes	1. Frequent mental and physical fatigue 2. Frequent weight changes 3. Nervous 4. Subject to infections 5. Insulin shock and coma may occur 6. Needs exercise to help reduce insulin need	1. Know the medical facts of the case. 2. Get cooperation of parents in promoting good health habits: rest, diet, medication, play. 3. Avoid highly competitive activities. 4. Protect child from injuries to avoid infections. 5. Normal activities are good if the point of marked fatigue is avoided.

Exceptional Condition	Factors With Implications for Physical Education	Guides for Planning Physical Education
Posture — This may be organic (malformed bones) or it may be functional (habit-caused).		
1. Organic	1. From no involvements to pain and disfigurement	1. Medical advice is necessary. 2. Follow prescribed exercises with extreme care. 3. Avoid activities which aggravate or increase deviation.
2. Functional	1. Same as above 2. Low endurance of specific muscles involved 3. May affect flexibility	1. Have medical classification as functional. 2. Request medically prescribed corrective exercises and follow them carefully. 3. Use activities which stretch shortened muscles and which strengthen stretched or elongated muscles. Strive for a balance in the length and strength of paired muscles. 4. Emphasize the relationship of proper body position (posture) to physical performance.
Low Physical Ability	At every grade level, there are children who seem to have lower ability to perform physical skills than the normal. These children may be innately endowed with less physical ability or may have had less opportunity than others. Since it is difficult, if not impossible, to know the cause, the teacher must try to help the child improve.	1. Teach skills which should have been learned at a lower age. 2. Give much encouragement and praise. 3. If a child is not strong but is flexible, encourage him to use his flexibility; if he is not fast but is strong, encourage him to excel in strength activities. 4. In team activities place the child in positions which utilize his best skills and which infrequently use his weak skills. 5. Teach child his limitations and strengths and how to select recreational activities in the light of this knowledge. For education. a. A child with strength in his legs but little in bowling, bicycling, aquatics, some rhythms, and outdoor education. B. A child with strength in his legs but little in his arms and little speed would be successful in jumping events, stunts which require leg strength, aquatics, kicking for distance, and rhythms.
Low Mental Ability	Mental ability as physical ability differs with children. The child whose mind will not retain long lists of rules or directions, or whose mind cannot work fast, will have difficulty in physical education.	1. Keep rules to a minimum. 2. Give directions slowly and repeat them. 3. Teach small parts, one at a time. 4. Review frequently. 5. Place the child in positions which allow time for deciding what to do. 6. Avoid tense situations. 7. Such children will have more success in individual and dual activities such as field events, social (couple) dance, bowling, aquatics, outdoor education, bicycling, small group games, and games with few rules.

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Chapter XIII

Outdoor Education

Outdoor education includes those direct learning experiences that involve enjoying, interpreting, and using the natural environment in achieving, at least in part, the purposes of education.

Today, outdoor education, including school camping, is accepted as an integral part of the total school program. It is generally accepted that every school youth should have, as a regular part of his school experience, opportunity for adventure and exploration—thus solving for himself some of the questions posed by life outdoors.

Objectives:

1. Provide experiences that will help the student recognize and accept his responsibility in conservation.
2. Provide knowledge and participation in a variety of activities for wholesome out-of-doors leisure time.

Physical Education and Outdoor Education

The field of physical education with its allied fields of recreation and health probably has more opportunities for making use of activities in the outdoors than any other curriculum area. Whether the immediate objective is that of healthful exercise and fun for its present value or that of providing students with lifelong recreational skills, outdoor activities provide a simple and economical answer. Here are invigorating activities in which the student can find challenge now and in which he can engage as long as he lives. Here are wholesome activities for the individual and ones in which his whole family can participate now and in the future.

Outdoor education activities make use of the natural environment. The activities and materials used are parcel and part of the locale. It would be a gross waste of time to use materials brought from school or to provide traditional school activities.

Available facilities differ in all communities. Many government and private agencies or organizations maintain land or water areas which may be utilized by the school system for outdoor recreational activities. Clothing, sleeping equipment, cooking materials, housing facilities, etc., will vary greatly according to the activities engaged in.

High schools have approached outdoor education through some of the following activities:

Casting and Shooting
Nature Study
Conservation
Arts and Crafts
Camp Craft
Overnight Hikes
Short Trips Out of Camp
Camp Recreation
Map and Compass Work
Astronomy
Study of Weather
Nutrition

ANGLING

The most popular sport in the country today is angling, with more than 20,000,000 Americans turning to fishing for pleasure and recreation. Two billion dollars are spent by these fishermen each year for fishing tackle, equipment, camping gear, boats, motors, clothes, and licenses. These same sportsmen travel nearly eight billion miles each year in pursuit of their quarry and pleasure.

Many schools have introduced angling into the physical education program. It is a desirable recreation activity because of its carry-over value into later life, and fishing is often referred to as a universal sport because of its intense appeal to people of all ages and every walk of life.

Bait Casting

Equipment

Rod—The bait casting rod should be at least 5′ and not over

6½′ in length. Most rods are constructed of fiberglass, although good bamboo and steel rods are available. In selecting a rod, choose one designed to cast a certain weight lure. Artificial lures and practice plugs weigh about ⅜ to ⅝ ounces. Glass rods with medium action should handle the ⅝ ounce plugs. Generally speaking, the weight of the lure and not the size of the fish anticipated should determine the action of the rod selected.

Reel—Any light spool medium priced reel suitable for fishing will do. Today practically all fishermen and tournament casters use standard, over-the-counter level winding fishing reels.

Line—Nine to 15 pound braided line is suitable for practice or fishing for the average size fresh water fish. Light lines cast better than heavy ones and cause fewer backlashes.

Plugs—⅝ and ⅜ ounce plugs are ideal for practice or tournament casting. Rubber plugs are recommended for use on highly polished gymnasium floors. It is best to use a swivel to avoid line twist.

Fundamental skills

Stance—A right-handed caster stands with the right foot slightly forward, which supports most of the weight of the body. Keep well balanced with the right shoulder slightly forward. The arm should be relaxed, bent at the elbow, with forearm horizontal with the ground. A comfortable stance is desirable.

Rod Position—The rod should be in line with the target and at an angle of about 15° above horizontal or 2:30 on the clock* for the average cast; higher for longer ones. Reel handles are pointed up. Rest the thumb on the thumbing bar, with slight pressure on the exposed line on the spool. Distance from plug to rod tip is 4 or 6 inches and is adjusted to suit rod action.

Back cast—Execute smooth back cast with little pressure on the rod, moving the rod in a perpendicular plane. The plug swings out, up, back like a pendulum inverted. Some excellent casters follow the flight of the plug by moving their eyes and heads up and back, always keeping plug in sight.

Forward Cast—Start forward cast slowly, then accelerate, releasing pressure on the spool. Stop the spool when the plug hits the water or floor. The development of coordination between sight of plug and thumbing the reel is essential. A good practice is to keep your eye on the plug.

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*In clock description of casting, imagine the caster as standing in the center of a clock face. Six o'clock is under his feet, 12 o'clock is over his head, 3 o'clock is directly in front of him, and 9 o'clock is directly behind him.

Retrieving Plug—In retrieving the plug, keep the rod tip high; avoid having the line drag on the floor or through the water. Dragging the line on the floor causes it to become dirty or worn. Dragging the line through the water makes casting more difficult because a wet line has a tendency to backlash.

Fly Casting

The fundamental principles of fly casting and bait casting are quite different. In bait casting and spinning, a plug or lure is cast and its weight starts the reel action; in fly casting, a light leader and a fly is attached to the line. Therefore, to cast a fly, one must first cast the line. Since the line is heavier than spinning or bait casting lines, a much longer rod (7′ to 9′) is needed, along with more human effort. The fly reel simply acts as a place to store the line. It is always a convenience to have a fly reel and it is relatively inexpensive. In general, more space will be required for fly casting instruction than for either bait or spin casting. For this art, the fly caster will need nearly as much space directly behind him as in front of him.

Equipment

Rod—The most practical for all-around use is a rod of 7′ to 9′. Rods shorter than 8′ are excellent for use on small streams and in indoor instruction.

Reel—A single action or automatic fly reel is recommended. The reel should have adequate capacity to hold the line of your choice.

Line—Double tapered or forward tapered lines are most satisfactory to cast. This is especially true in casting a dry fly. However, for the beginner learning to cast on water or a gymnasium floor, a level line will work well, provided that it is heavy enough to get the proper action out of the rod. Regardless of whether the line is level or tapered, it must be the proper weight and size so that the action of the rod will cause the line to be cast with a small loop. This is essential for line control in a stiff breeze.

Leader and Fly—A non-tapered leader approximately 6′ in length is often used for the beginners' practice sessions and is highly desirable for some kinds of fishing. This type of leader should be 6, 8, 10, or 12 pound test, depending on the size and taper of the line. For dry fly casting and fishing, by all means use a tapered leader. For practice, remove the barb from a good dry fly and select one that is easily visible.

Fundamental Skills

Stance, grip, and rod position—The right-handed caster should stand in a comfortable position with the right foot forward, gripping the rod handle naturally with the line held between the thumb and index finger of the left hand. The rod should be pointed at about what is commonly referred to as the 1:30 o'clock position, which is also 45° above horizontal, with 20′ or 25′ of line and leader extended on the water or gym floor.

Pick-up and back cast—With the rod and line as described above, begin slowly to raise the rod tip so that all but several feet of the line and leader are off the gym floor. With continuing motion and increasing speed, put the line into the air on the back cast by bringing the rod quickly to the 11 o'clock position, or 120° above the horizontal, holding it momentarily until the line completely straightens out behind.

Forward cast and delivery to the water—When the line has fully straightened out in the back, start the rod forward and put considerable power into the cast by exerting pressure on the rod handle. Both wrist and arm action may be used in executing the complete cast. Stop the rod at about the 2 o'clock position and the line will continue to move forward and come to rest on the water or gym floor.

The false cast —Rather than letting the line come to rest at the end of the forward cast, start the rod in motion on another back cast when the line has straightened out on a plane about three feet above the level of the floor or water. This may be repeated a number of times to help the caster measure distance, extend line, and *dry off the fly*. Additional line control may be achieved during the false cast by holding the line against the rod handle with the first two fingers of the right hand. The casting line may be lengthened during the false cast by shooting the line through the guides while the line is in its forward motion.

The roll cast—To make the roll cast, raise the rod tip to about the 1 o'clock position or 60° above the horizontal. The line will then be pulled back through the water and will tend to hang down along the rod. Next, continue the rod motion back to the 11 o'clock position and immediately move it forward to 2 o'clock.

This will cause the line to roll forward and straighten out on the water or gym floor.

Spin Casting

Equipment

Rod—Select a spinning rod ranging in length from 6′ to 7½′. For class instruction and tournament competition, the rod selected should cast ¼ to ⅜ ounce lures. For some types of fresh water fishing, light rods designed to cast lures weighing less than ¼ ounce are practical. A good rule to follow in selecting a spinning rod is to choose one to handle a certain weight reel, line, and lure. In other words, choose a light rod to be used with a light reel, line, and light plug.

Reel—Acceptable spinning reels are open and closed spool types, manual bale, and finger pick-up. Spool capacities vary. For fresh water fishing, practice, and competition, use a good medium-sized reel, properly filled with a 5-pound or 6-pound test, flexible, monofilament line. The slip drag adjustment must be dependable and anti-reverse is desirable.

Line and Plug—A 5-pound or 6-pound test, flexible, monofilament line should be used for practice, competition, and most fresh-water fishing; ⅜ or ¼ ounce plugs are ideal for practice; rubber plugs are recommended on highly polished floors. Swivels are recommended to avoid line twist.

Fundamental Skills

The caster stands in a comfortable position with the right foot slightly forward, supporting most of the body weight. The rod is pointed at the target area and held at the 2 o'clock position, or 30° above the horizontal. The plug or lure hangs 6 or 8 inches from the rod tip depending upon its weight and the stiffness of the rod. The pick-up device is open and turned to the bottom of the reel by winding in reverse the reel handle after the line has been secured by the index finger of the rod hand. The line is held firmly against the rod handle or stationary spool with the index finger until released during the cast.

To begin the cast, dip the rod tip slightly, causing the rod to bend downward. Upon the completion of the downward bend, quickly bring it up to the 12 o'clock position. The weight of the plug will cause the rod to bend backward. Without hesitating on the back cast, bring the rod quickly forward on the forward cast and release the monofilament line. Stop the rod at the 2 o'clock position.

If the cast has been started too high, the lure may be slowed up or dropped into the target area by touching or "fanning" the line with the tip of the index finger firmly against the spool as the lure nears the target area. This is to prevent excess line from slipping off the spool. The follow-through will cause the rod to move forward to about the 3 o'clock position. The pick-up device will engage itself automatically and retrieval of the line can be begun at once by turning the reel handle with the left hand.

BOATING

Rowboats have long been utilized for occupational and recreational purposes. They are the most popular small craft and provide the means for the sheer enjoyment of being out on the water.

Other types of boating including sailing, canoeing, and motor boating, each with its own terminology and skills required. The outline presented here is just one example of boating program which could be developed.

Activity

The boat should be entered over the side with the rower entering first, then the stern and bow passengers. The weight should be centered with the heavier passenger in the stern.

In rowing, the rower sits facing the stern, legs straight and braced on a floor board. There are four parts to each stroke—the catch, the pull, the feather, the recovery.

In the catch, the blades of the oar enter the water behind the rower at about 45° angle with the long axis of the boat, with about 2/3 of the blade entering the water. The blades are then pulled in a wide, shallow sweep toward the stern. It is important for the rower to keep the elbows close to the sides of the body. Feathering is the turning of the blades parallel to the water surface to reduce wind resistance and return the oar more efficiently to the starting position. In this movement, the blade is raised out of the water and knuckles turned upward toward the body. The recovery is the return of the blades to a position to begin the next catch.

Rhythm, efficiency, speed and the ability to row in a straight line are attained through practice.

To propel the boat stern first, the straightaway stroke is reversed. This is known as backing the water. To turn the boat, the rower pulls harder on the oar opposite the direction in which he wishes to turn. A sharper turn is made by lifting one oar out of the water. To make a pivot turn, row with one oar, and back water with the other.

A landing on a beach is made by rowing the bow toward the beach and shipping the oars (blades forward, handles aft) when contact is made. Exit is made over the bow. Be sure to pull the boat in high enough on the beach to prevent drifting. A landing alongside a dock or pier is made with the wind.[1]

Definitions of Terms

Aft—Near or toward the stern.

Amidships—Halfway between bow and stern, in the middle of the boat.

Beam—The breadth of the boat at its widest part.

Blade—The flat, flared portion of the paddle.

Bow—The front of the boat.

Fore—The area of a boat adjacent to the bow.

Grip—The handle of the paddle.

Hull—The frame of the boat.

Lee—The side of the boat away from the wind.

Painter—A rope used for securing a boat.

Port—The left side of the boat looking from the stern to bow.

Stern—The rear end of the boat.

Wake—The track left by a boat in the water.

Windward—Toward or into the wind.

Teaching Suggestions

Group teaching can be utilized on topics such as nomenclature, basic principles of rowing, and some practice in feathering. Each rower should receive individual instruction and practical experience in handling the boat. The student should be considered a safe rower before handling the boat alone.

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[1] Gabrielsen, Alexander M. et. al. *Acquatic Handbook*. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1960, pp. 127.128.

Motivation may be gained through individual achievement tests, awards for form in rowing, and competition promoted by a boating meet.[2]

Safety Precautions

Water safety is of paramount importance in any boating program and must be stressed continuously. A swimming test may be advisable prior to boating. Non-swimmers should be accompanied by a life saver or wear a Coast Guard approved life-jacket. South Carolina law requires that a life jacket be on board for each passenger.

Regulations and rules of safety should be posted conspicuously and clearly understood. Safety regulations should include:

1. Do not overload the boat. Know its capacity.
2. Do not rock the boat. There is no place in boating for the show-off.
3. Do not leave a swamped boat. A swamped boat will support you. It is not good practice to put more people in a boat than it will support when swamped.
4. Do not change seats in a boat. Unexpected shifting could cause the loss of footing or swamping.
5. Do not stay in a boat during a thunderstorm. Lightning and capsizing are two dangers.
6. Do not take water safety lightly. Enjoy water sports but respect water as a potential killer.

CAMPING

Camping is fast becoming one of the nation's foremost recreational activities. It is enjoyed by young and old alike and is an excellent family activity. It teaches conservation and science, as well as offering many excellent opportunities for physical activity. Our natural resources have provided the foundation for our development as a nation, and their utilization has influenced both our prosperity and our character. Camping can help young people develop research skills as well as cultivate the attitudes and skills for exploration.

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[2] Ibid., p. 128.

Activity

A demonstration camp with the following course of study should be established:

A. Preparation
  1. Selection of camping items
    (a) Sleeping
    (b) Tent facilities
    (c) Cutting equipment
    (d) Lighting equipment
    (e) Cooking equipment
    (f) Camping apparel
  2. Planning of menus and selection of food

B. Selection of Camp Site

C. Use of Equipment
  1. Practice pitching a tent
  2. Practice use of cutting and cooking equipment

D. Camp Safety and First Aid

HUNTING

Hunting has evolved from a necessity to a sport that millions enjoy today. Young and old alike turn to the open spaces to find wholesome adventure, competition, suspense, and relaxation through a sport that requires keen use of the senses plus specialized knowledge and skills.

Activity

It is recommended that the spring type air rifle be utilized as an instructional tool in teaching hunting. This will permit teaching fundamentals of shooting and safety as a part of the physical education curriculum. Limited space can be used since the National Rifle Association range of 15 feet is recomended and equipment is economical.

In general, the course of study should include the following topics:

1. History of Guns

2. Gun Handling
3. Setting up the Range
4. Shooting Skills
5. Range Procedure
6. Field Training

Equipment and Facilities

Fortunately little is needed in the way of facilities. Most schools can use such areas as gymnasiums, auditoriums, protected playground areas, and halls that have guarded doorways.

Equipment and materials are relatively simple and inexpensive.

1. Instructional materials available from the National Rifle Association.
2. Air rifles, pump and lever cocking actions. It is recommended that one air rifle be available for every three students.
3. BB's in case quantities.
4. Official NRA and practice targets.
5. Backstops which can be made from large cartons. A canvas, heavy cloth, or blanket may be hung inside the carton to stop the shot and make it possible to reclaim the BB's.

Safety Precautions

Every shooter should learn the following rules, which should be on display whenever guns are being discussed.

1. Treat every gun as if it were loaded and ready to shoot.
2. Never carry a loaded or cocked gun into a home, camp, or public place.
3. Be sure your gun barrel is always clean and not plugged.
4. Carry your gun so that you can control the direction of the muzzle, even if you stumble.
5. Be sure of your target before you pull the trigger.
6. Never point a gun at anything you do not want to shoot.
7. Guns not in use should always be unloaded.
8. Never climb a tree or fence or jump a ditch with a loaded gun.
9. Never shoot at a flat, hard surface or the surface of water.
10. Respect other people's property.

Chapter
XIV

Rhythmical Activities

The secondary school should make available a program of rhythmic activities. Learning experiences included should enable opportunity for students to participate in and enjoy all types of co-educational dance activities.

Dance is an important component of community, social life, a part of our heritage, and a means of communication. Since communication is a basic need of man, individuals can satisfy this need through the body movements that dance offers.

Objectives

1. Provide students with pleasurable and enjoyable experiences in rhythmical activities.
2. Aid students in developing an appreciation and knowledge of dances and customs of our own nation and other countries.
3. Stimulate and provide opportunities for self-expression and creativeness.
4. Develop a vocabulary of dance.
5. Develop grace, poise, and agility.
6. Develop an appreciation for aesthetic and beauty of rhythmical movement.
7. Develop an awareness of the relationship of dance to music.

Rhythmic Factors and Patterns

Music and dance are closely related. Dances are rarely done in America and Europe without music. There is a basic relationship between movement and music.

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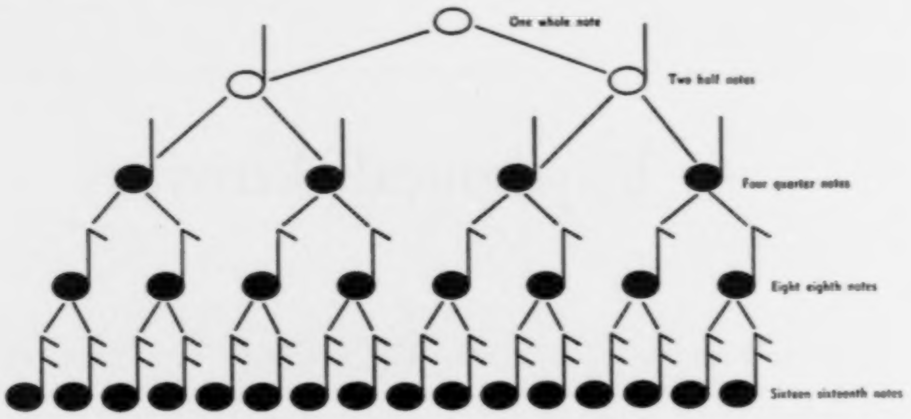
Tempo is determined by the musical notation, based on the key signature of printed music. In 4/4 time, a whole note gets one beat; half notes, 2 even beats; quarter notes, 4 even beats; and eighth notes, 8 even beats.



1. Draw musical notations of different time values and give to class. Then place musical phrases on the board or on an overhead projector for students to observe as you point to notations. The students having specific notations should stand and count aloud.
2. Assign groups of specific notations for students to clap out the beats.
3. Play records of different tempos, having students clap out the time in order to get the feeling of the different tempos.
4. Ask the music supervisor or band director to assist in explaining more intricate rhythmic patterns to the class.

Rhythmic patterns are combined beats. There are two basic types of rhythmic patterns—even and uneven. Even rhythmic patterns are units of beats of equal value and are alike. Example: ♩♩♩♩ (4/4) Uneven rhythmic patterns are units of beats of unequal value. Example: 𝅗𝅥♩♫ (4/4) Each of the patterns may have the same time value, but the beats differ.

Definitions of Terms

1. *Rhythm*—A pulsation of the movement, a recurrence of pattern, like breathing. This pulsation makes the movement alive. In basic terms, this includes underlying beat, tempo, accent, metric pattern.

2. *Underlying beat*—A unit of measure recurring at regular intervals.

3. *Tempo*—The rate of speed—fast, slow, medium, or combinations of these speeds.

4. *Accent*—A strong sound or heavy pulsation.

5. *Metric or rhythmic pattern*—Long and short intervals of time. The note values.

6. *Time signature*—Denotes how many counts to a measure and what kind of note gets one count.

7. *Phrase*—An incomplete part of the theme.

8. *Form*—The structure of the music which includes various themes and phrases.

A—One theme.
AB—Two themes.
ABA—Two different themes, the first being repeated after the second.
ABACA—Rondo, the first theme being repeated after each of two other different themes.

Theme and variation—the same theme repeated with some change.

Fundamental Locomotor Skills

Locomotor skills are essential in dance and rhythmic activities. They are found in every form of dance, whether it is classic ballet, primitive, folk, social, or modern. The locomotor movements include walking, running, leaping, hopping, jumping, sliding, galloping, and skipping.

Folk Dance

Folk dances reflect the culture of people in various parts of the world. These dances came into being as parts of rituals and ceremonies, and forms of self-expression.

Folk dancing involves traditional steps and is composed of the motor skills used in walking, running, hopping, jumping, leaping, skipping, galloping, sliding, stamping, and clapping.

Fundamental Steps

Polka

The polka is a peppy 2/4 rhythm. It is easy to learn the polka by galloping around the room with one foot in the lead. Try eight gallops with the right foot leading, then change to the left foot leading for eight gallops. Then try changing the lead foot after every four gallops, then after every two. The student is then doing the polka. This dance is usually done while turning around and around. The dance position is for the boy to face partner with his hands on her waist and the girl's hands on his shoulders. The girl starts on the opposite foot, as in social dancing.

Schottische

The rhythm for the schottische is an even four counts to 2/4 or 4/4 rhythm. Start a series of steps slowly at first, taking an even four counts for each step. Starting with the left foot, take three walking steps forward and one hop in place. Then try the schottische beginning with the right foot: right, left, right, right hop.

After the students get the feel of the movement, increase the speed. Use variation in directions, such as going backward, sideways, or in a zig-zag line with one schottische on the zig and the next on the zag. Now dance with a partner, standing side by side, inside hands joined, and beginning with the same foot. A light running step can be substituted for the walk.

Two-Step

This step is in 2/4 or 4/4 time. The count is "one, and, two, and." On count one, step diagonally left with the left foot. On count "and", close the right foot to the left and transfer the weight. On count two, step diagonally forward again with the left foot. On count "and" hold. Repeat the step, beginning with the right foot. As skill is gained, use gliding step.

Mazurka

This step differs from the schottische and the polka because in a series it is always begun with the same foot. The mazurka step is basically a combination of two walks and a hop done to an even 3/4 rhythm. The dance is usually performed in a sideward movement. The dancers begin with their left feet sliding to the left side, draw the right foot to the left and transfer the weight to this right foot, then hop right. Repeat the step, again beginning with the left foot. Practice the mazurka in both directions and try a combination of three mazurka steps and three stamping steps in place. Now reverse direction and begin the step with the right foot. To help learn the combination of movements it is best to say the words— "slide, close, hop; slide, close, hop; slide, close, hop; stamp, stamp, stamp."

Positions

1. *Dance position or waltz position*—Partners are facing, boy's right arm around girl's waist, her left hand on his shoulder. Boy's left hand and girl's right are clasped, with arms extended. In square dance, the swing is done with partners right shoulder to right shoulder.

2. *Hip-shoulder position*—Partners are facing, boy's hands on girl's hips, girl's hand on boy's shoulders.

3. *One-hand grasp*—Partners are facing, right or left hands joined. Usually this is done with arms straight and leaning away from each other. Sometimes, however, as in the Bavarian Lander, the elbows are bent and the forearms held close together, hands held high.

4. *Two-hand grasp*—Partners are facing, both hands joined, usually done as the one-hand grasp with partners leaning away from each other.

5. *Cross-grasp*—Same as two-hand grasp, but with hands crossed.

6. *Linked arm grasp*—Partners hook right or left arms, thus facing in opposite directions. This may also be done with partners side-by-side and facing in the same direction with inside elbows linked.

7. *Back grasp*—Partners face in opposite directions with right shoulders together. Right arms are extended BEHIND partners' backs, right hand grasping partner's left hand at waist.

8. *Open position*—Partners are side-by-side, inside hands joined. The position of the hands varies with the dance. In many cases, the arms are allowed to hang loosely. In some of the Norwegian dances, the elbows are bent and the hands held at shoulder height. In some of the Brittany dances, the elbows are bent at shoulder height with the hands held high and the little fingers lightly hooked. This position is usually known as the promenade position. In some of Russian dances, the boy's right arm extends

across the girl's shoulders and their clasped hands are held high.

9. *Hungarian turn position*—Partners are side-by-side, facing in opposite directions. The right arm is extended across in front of the partner's waist with his right hand at the partner's hip. The free arm is extended with the hand high over the head.

10. *Skater's position*—Partners are facing forward, side-by-side, hands grasped in front with the hands crossed.

11. *Waist grasp*—Partners are side-by-side, boy's arm around girl's waist, girl's left hand on boy's right shoulder. Sometimes her right hand is held in his right hand at her hip.

12. *Four hand open position*—Partners are side-by-side, left hands clasped.

13. *Shoulder grasp*—Partners are facing, right hand on partner's right shoulder, free arm held high.

14. *Arch grasp*—Partners side-by-side as in promenade, but with girl's right hand in boy's right with her arm arched over her head.

15. *Trull grasp*—Girl holds boy's middle finger over head and pivots.

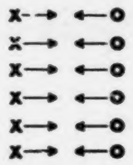
16. *Varsovvienne position*—Partners face the line of direction with the girl slightly in front of and to the right of the boy. He holds her left hand shoulder-high in his own left hand, his right arm extended across her back, his right hand holding her right hand.

Formation for Dances

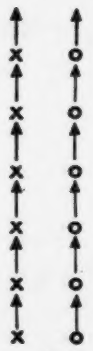
The dances differ in style, steps, and character, although the initial formations of some dances are the same. As an example, American folk dances may be grouped as square, contra, round, circle, and couple; European as square, circle, and line; or American and European dances grouped as square, circle, and couple. Dances may likewise be grouped from other geographical areas according to their initial formation.

1. *Longways or Contras*

Couples stand one behind the other or there may be a line of girls facing a line of boys. They also may be arranged in a large circle. In longways, not more than eight couples to a set is considered desirable. Number one couple is the *active* couple and leads the figure and casts off each time to move *down* the set. This moves each couple up one place, number one couple becoming inactive and number two couple becoming the active couple, leading the figure and casting off the next time.

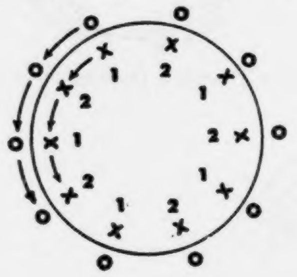


A. Longways set—Partners facing



B

B. Longways set—facing up

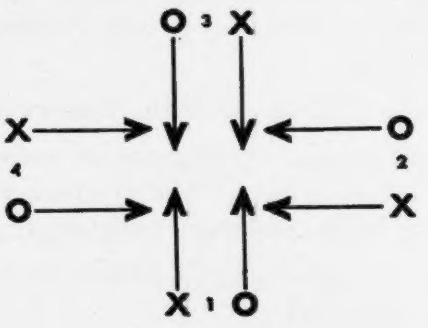


O=*Lady*
X=*Gent*
⟶=*Direction*

C. Contras—Double circle

2. *Square or Quadrille*

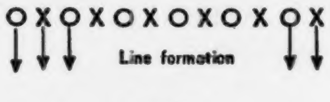
Dancers are in groups of four couples, one on each side of the square. Usually, the couple nearest the caller is designated as the *head* couple, the opposite couple being also *head* couple and the other two *side* couples. The couples are numbered counterclockwise around the set.



Square or Quadrille

3. *Line Dance*

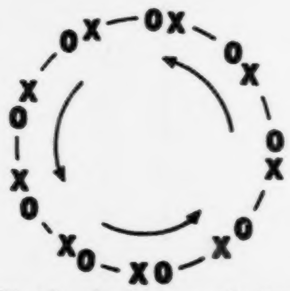
Dancers are in one line, which may be in circle formation.



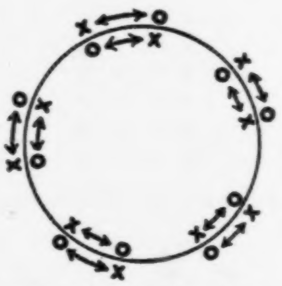
Line formation

4. *Circle* or group of three or four in a circle

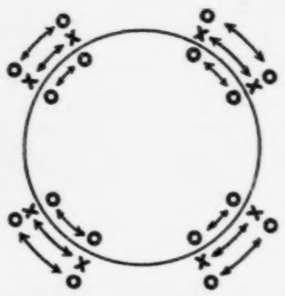
Dancers may be (a) in a single circle with or without partners; (b) with partners, all facing counterclockwise or clockwise; (c) with partners—two couples facing; (d) in groups of three or four as in (b) or (c).



A. Single circle—couple facing Counterclockwise



B. Two couples facing in a circle



C. Trios in a circle

Teaching Suggestions

Teaching suggestions involve selection and presentation of materials, and correlation with music and rhythm. The following are specific suggestions:

1. Familiarize the students with the history of the folk dance.
2. Show films, filmstrips, or pictures of costumes to the class. Discuss the relationship of the costume to the movement, i.e., boots with heels encourage foot tapping.
3. Use persons of various nationalities from the community and school as resources.
4. In teaching a folk dance, allow the students to become familiar with the music and the basic steps of that specific dance. Then proceed with other parts to make up the dance in its entirety.
5. Avoid the drill method.

6. Make use of the circle arrangement for the class. It is easier for the teacher to present materials, be observed by all students, and to detect difficulties quickly.
7. Be sure that the dances are suited to the physical, mental, and social development of the group.
8. Proceed from simple to more complex step patterns.
9. Teach folk songs which are used with the dance.

Skill Tests

1. *Step pattern* (in terms of floor pattern, step pattern, rhythm accent)
   a. Describes a clean-cut, accurate floor pattern.
   b. Forward, backward, sideward, and turning movements are definite and properly spaced.
   c. Sharp corner turns or rounded curved paths to be followed are clearly defined.
   d. Step patterns are accurate with all hops, stamps, jumps, etc., definite and correctly timed.
   e. Accents in step pattern are well-defined.
2. *Transitions*
   a. Transitions from phrase-to-phrase and from figure-to-figure are made smoothly and easily so that there is no break in the movement of the folk dance from start to finish.
   b. Students anticipate each new phrase of movement and perform easily and unhestitatingly throughout the dance.
   c. Each phrase is finished completely, not leaving counts unfinished.
3. *Coordination*
   a. Performance is well-coordinated so that body is poised and moves rhythmically as one unit.
   b. Range in terms of flexibility and quality is adequate and controlled.
4. *Style*
   a. Spirit of each specific dance is accurately and effectively re-created with every preformance, whether the spirit is vigorous, free, languorous, reserved, fiery, etc.
   b. Use of arms, legs, feet, head, and torso in relation to one another is appropriate in every detail.

Square Dance

Square dance, the traditional American dance form, varies in its form and style in the sections of the country in which it is done. Although recently there has been some interchange, there are some regional characteristics which still persist. In New England the quadrille, contra, circles and rounds are particularly popular. In the South the circle formation with figures for two couples is most popular although the Western quadrilles have increased in popularity. In some of the southern Appalachian areas, the running set, which is a direct descendant of the English country dance, is still popular. In the Western area quadrilles and rounds are the most popular forms.

It is important that all of these regional styles be included since this will insure a better understanding of our American heritage.

Square Dance Terms

1. *Partner*—Lady on right, gent on left.
2. *Opposite or corner*—Lady on gent's left, gent on lady's right. In a square, the person who is on adjoining side of square.
3. *Honor or address*—Gentleman bows and lady curtsies.
4. *Balance*—New England Style: Step on right foot, brush left heel through, repeat stepping left and brushing right. Western Style: Two steps backward away from partner, two steps forward.
5. *Swing*—Take partner in dance position, turn in place. Use walking step or buzz step. Buzz step: partners keep right feet together, weight on right, pivot, pushing with left foot.
6. *Elbow Swing*—Hook elbows with partner, turn in place.
7. *Promenade*—Southern Style: side-by-side with partner, lady's right hand in gent's right hand which is on lady's right shoulder, left hands held in front OR hands crossed in front. New England Style: side-by-side with partner, gent's right arm around lady's waist holding her right hand at her hip, left hands in front.
8. *Allemande left*—Corners or opposites join left hands and turn in place.
9. *Allemande right*—Same as allemande left, but with right hand joined with lady on right.

10. *Sashay*—Slide step, (step and draw) done in dance position with partner or alone.
11. *Cast off*—In contras, a movement in which the entire line follows the head gent and head lady leading to the foot, the head couple forming an arch, and all others returning to place. In using the cast off to move down the set one place, the active person turns out, the person below placing an arm around his or her waist.
12. *Grand right and left*—In circle, partners face each other, taking right hands. All progress around circle, taking right and left hands alternately until partners meet on opposite side.
13. *Do si do*—Two dancers pass each other, passing right shoulders, move back-to-back around each other, and move backward to place. If repeated, pass left shoulders.
14. *Do pas so*—(Western form) Two couples circle to left; two ladies cross over, join left hands, turn 3/4 round; two gents move back-to-back, right shoulder leading, turn opposite ladies with right hands, return to partners, left shoulder leading, take left hands with partners, and turn lady to place.
15. Grapevine—Step to the side on the left foot, step the right foot behind the left, step to side on the left foot and step the right foot in front of the left foot.

Teaching Suggestions

1. Know the material and give clear, concise directions to the students.
2. Teach the students the basic movements of the dance.
3. Be sure that each student learns the proper alignment for the dance so that there will be no confusion as to position.
4. Have students walk through the dance along with the calling and music. Then repeat the movement with recorded music (and the calling if included on the record.)
5. Make sure students have mastered the basic terms to be used.
6. Stress and maintain good discipline.
7. Use a public address system with large groups.
8. Avoid having students clap when the calls are with the music unless the record designates such. Clapping makes it hard to hear the calls.

CHART X
FOLK DANCE RECORDS

COUNTRY	NAME OF DANCE	TYPE OF FORMATION	RECORD NUMBER AND COMPANY
American	Varsouvienna	Couples	Decca 25060; Album 9, Educational Activities
	Texas Star	Square	Album 3, Educational Activities
	Life on the Ocean Wave	Square	Capitol 4037; Old Timer 8059
	My Little Girl	Square	Album 3, Educational Activities
	Red River Valley	Square	Album 8, Educational Activities; Folkraft 1056; Imperial 1096
	Virginia Reel	Square	Album 4, Educational Activities; Capitol 4028; Old Timer 8006
	Oh! Johnny	Circle or Square	Decca 954; Imperial 1099; MacGregor 652-A
	Captain Jinks	Square	Shaw 133 or Methodist 103
	Bingo	Double Circle	Folkraft 1189; Victor 20989; Album 13, Educational Activities
	Bunny Hop	Longways	Capitol 2427
	Hokey Pokey	Single Circle	Capitol 2427
	Good Night Ladies	Double Circle	Burns Record Company, Record 335-336
	Bow Bow Belinda	Double Circle	Burns Record Company, Record 513-514
	Heel and Toe Polka	Double Circle	Burns and Evans, Album 11 #225; Victor Record #25-1002; Album 9, Education Activities
	Patty Cake Polka	Double Circle	Folk Dancer 1501; Album 6, Educational Activities
	California Schottische	Varsouvienne position	Imperial 1046 FD 9; Capitol 4018
	Military	Couples in Circle	Decca 25062
	Rochester Schottische	Couples in Circle	Honor Your Partner #301; Album 6, Educational Activities
	Cotton-Eyed Joe	Couples in Single Circle	Capitol 4016; Folkraft #1035
	Boston	Circle	Imperial 1093
	Glow Worm	Couples in Double Circle	Four Star 1365
	Oxford Minuet	Double Circle	Decca 20559 B
	Tuxedo	Circle	Decca 25059
	Black Hawk Waltz	Couples in Closed Ballroom	Folkcraft 1046; Capitol 4015
	Rye Waltz	Couples arranged in Circle	Imperial 1044; Old Timer 8009
	Skaters Waltz	Couples	Shaw 102 or Victor 42-0144

COUNTRY	NAME OF DANCE	TYPE OF FORMATION	RECORD NUMBER AND COMPANY
Scotland	Highland Schottische	Single Circle	Burns Album B341, Album 552
	Road to the Isles	Couples in Double Circle	Folkraft 1095 or 1416
	Highland Fling	Solo	Victor 45-6179
Bulgaria	Tropanka		Burns Record Company, Record 555-556
Austria	Seven Steps	Double Circle	Victor 456-172, 45rpm 41-16172
Hawaii	Little Grass Shack		B-501 Lyons
	Hukilau		
	Christmas Lucu		
	Kawiki		
	Ka Lai (Stick Dance)		
	A Hila Wau		
Holland	Dutch Couples		Burns Record Company, Record 333-334
	Little Dutch Girl		Burns Record Company, Record 517-518
Norway	Norwegian Mountain March	Sets in Circle	Victor 45 – 6173, 20151
Hungaria	Cshebogar	Single Circle	Victor 45 – 6182
	Csardas		Burns Record Company, Record 343-344
Estonia	Jamaja Lubajaly	Couples	Folk Dancer MH 1047
Latvia	Sudmalinas (Little Mill)	Two Couples	
Finland	Martin Wapper		Burns Record Company, Record 521-522
	Raatikko	Two Circles	Album #22, Educational Activities
Israel	Horah	Circle	Victor 25-5079
	Shibolet Bassadeh	Circle	
Czechoslovakia	Doublebska	Couples	Folk Dancer MH 3016
	Cytri Kroky	Circle	
Yugoslovia	Selzancica Kolo	Circle	
Canada	Canadian Logger	No Partners	
Italy	Tarantella	Two's Facing Two's	
Japan	Tanko Bushi	No Partners	

COUNTRY	NAME OF DANCE	TYPE OF FORMATION	RECORD NUMBER AND COMPANY
Switzerland	Weggis	Double Circle	Burns Record Album F777, Album H522, Imperial 1008
	Swiss May Dance		Burns Record Company, #333-334
	Kettengalopp	One Circle	Album #22, Educational Activities
Greece	Misirlau		LPM 1620 — Lyons
	Tsamiko		
Denmark	Sextur	Circle	Folk Dance Record MH 1021
Russian	Troika	Triple Circle	Methodist 105, Kismeth 104
	Meiteliza	Sets of three	Educational Dance Recordings
England	May Pole Dance	Circle	Victor 20990B or Decca 1793B
	Sellenger's Round	Single Circle	
	Gathering Peascods	Single Circle	
	Ribbon Dance	Double line of couples	
	Cumberland Square Eight	Square	Educational Dance Recordings
Sweden	Carrousel		Burns Record Company, Record 513-514
	Hop Mather Annika		Burns Record Company, Record 523-524
	Swedish Clap Dance		Burns Record Company, Record 551-552
Mexico	La Raspa	Partners Facing	Methodist 106, Album 10 Educational Activities
	La Cucaracha	Couples Side by Side	
	Donkey Dance		Burns Record Company, Record 521-522
Germany	At The Inn	Couples	Folk Dancer MH 1022
	Bummel Schottische		Burns Record Company, Record 552-554
Lithuanian	Kalvelis		Burns Record Company, Record 771-772
Ireland	Irish Lilt	Solo or Lines	Victor 45 — 6178
France	Jobi Ki, Jibi Da	Couples or Circles	Folk Dance MH 1044
	Minuet	File of Couples	Folk Dance House

MODERN DANCE

Modern dance is a challenging and satisfying experience through which personal growth may be developed, appreciations enlarged, and personalities expanded. The body is considered an instrument of expression and students should be given the opportunity to develop this expression. Modern dance is a creative art and must be built up on the foundation of body movement, rhythms, spatial relationship, quality, and principles of composition.

Remember—it is not the objective of dance in physical education to produce professional dancers, but to provide opportunities for all to participate and to develop to the limit of their capabilities.

Modern Dance Terms

1. *Accelerando.* With the speed of movement increased slowly.
2. *Adagio.* Gradually, gracefully.
3. *Andante.* Flowing yet moderately slow.
4. *Allegretto.* Quick, but slower than Allegro.
5. *Allegro.* Quick, lively, vivace.
6. *Antiphonal.* Having the same effect as of question and answer.
7. *Augmentation.* Causing a decrease in movement by the value being increased.
8. *Beat.* Fundamental unit in rhythm referring to movement.
9. *Bource.* A dance; right foot behind left, left foot to left side, and right foot crosses to left.
10. *Brush.* Any movement of the leg in which the foot brushes or slides on the floor at some place.
11. *Canon.* A dance with two or more groups performing exactly alike, but beginning at different times. A form of counterpoint.
12. *Chasse.* Slide.
13. *Choreography.* The art of dance arranging or composing using symbols; the total dance arrangement.

14. *Climax.* The most interesting point, the apex of the dance or movement.

15. *Counterpoint.* Movements done in opposition, but harmonious.

16. *Crescendo.* With a slow increase of range, speed, or dynamics, or their combinations.

17. *Cumulative Rhythm.* The effect of a change of one count in every measure.

18. *Design.* Plan, order, or pattern of dance.

19. *Diminuendo.* Gradual decrease in speed, size of movement, or intensity.

20. *Direction.* Movement following the floor pattern.

21. *Dissonance.* A strange or twisted quality corresponding to a harsh, unpleasant sound.

22. *Distortion.* Stretching of a normal movement.

23. *Dramatic movement.* Movement used to signify a theme or an idea.

24. *Duple Rhythm.* Rhythm built on multiples of two or on the basis of two.

25. *Dynamics.* Tension or force put in motion.

26. *Elevations.* Movements that lift the body upward, such as jumps, leaps, skips.

27. *Extension.* Straightening or stretching the body or parts of the body in any direction.

28. *Face.* The loss of balance that is controlled.

29. *Floor Pattern.* A plan or direction of movement for dancers to use on the floor.

30. *Focus.* Object or place for the dancers to direct attention.

31. *Gavotte.* A dance step; step forward with left foot, then with right foot, repeat with left, hop, and land with both feet close together (right foot in front of left).

32. *Improvision.* Dance movement done in response or expression without preparation.

33. *Intensity.* Amount of muscular or emotional power or force for a dance movement.

34. *Kick.* A quick movement of the leg upward.

35. *Largo.* A dance movement that is slow and stately.

36. *Legato.* Movement with harmony, smoothness.

37. *Lento.* Gradual.

38. *Lunge.* The thrusting of the body by taking a large step, transferring the weight of body onto stepping foot.

39. *Mood.* The feeling that is expressed by certain movements.

40. *Motif.* The idea that appears throughout a dance composition.

41. *Music Notation.* The system of recording music and directions for performance by using symbols.

42. *Opposition.* Difference between two or more movements.

43. *Pantomime.* Telling a story using body movements or gestures, without words.

44. *Pas de Basque.* Leap sideways to right and land on right foot, bring left foot to right foot, and directly across it to step on left foot, and cut left foot directly forward.

45. *Pattern.* Plan and design of dance.

46. *Percussive.* Sudden, sharp movement.

47. *Pianissimo.* Very light, soft dance movement.

48. *Pirouette.* Step to right side with right foot, swing left foot in front and around rear of right foot.

49. *Pivot or Pivot Turn.* Step on right foot and turn on the right foot to the right; usually one half turn is taken on each step.

50. *Plie.* While in standing position, bend the knee.

51. *Point.* With toes flexed, extend ankle fully.

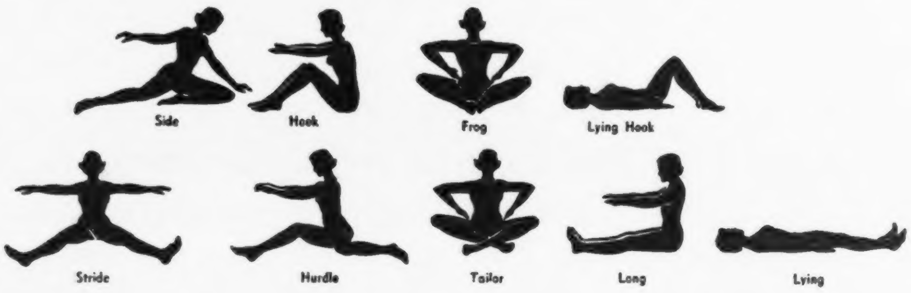
52. *Retard.* Reducing the speed of movement slowly.

53. *Round.* A type of counterpoint in which groups or individual dancers use a theme and repeat it. Each begins at a different time, one group ending several measures later.

Techniques and Warm-Ups

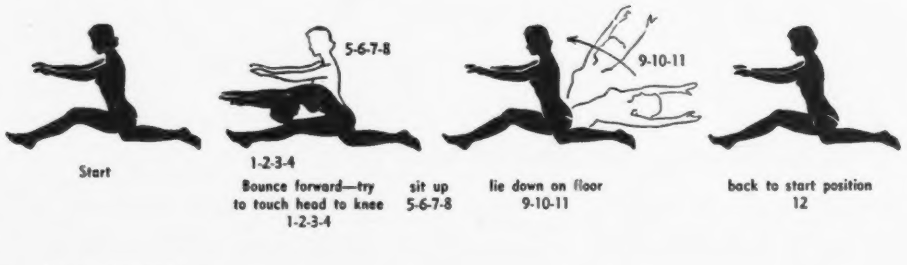
Basic techniques and warm-ups are given at the beginning of the class period, first starting with warm-ups on the floor, then using standing and moving progressions. At all times the teacher should be aware of correct posture and body movements. As the student grows in control and techniques, more difficult combinations can be used. However, never let a series of techniques or exercises become a drill so that the students move mechanically.

Suggested Starting Positions on the Floor for Dance Warm-Ups

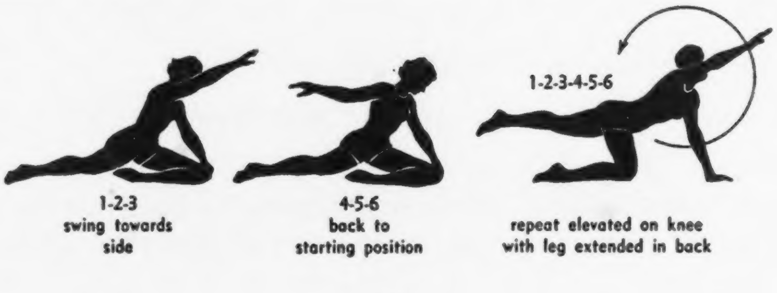


Suggested Warm-Up Exercises

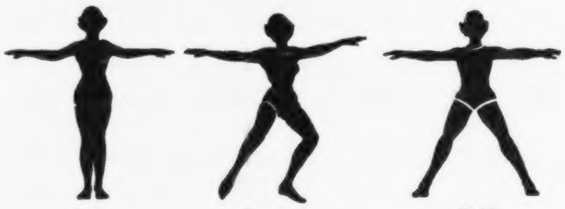
1. Hurdle


5-6-7-8
9-10-11
Start
1-2-3-4
Bounce forward—try to touch head to knee 1-2-3-4
sit up 5-6-7-8
lie down on floor 9-10-11
back to start position 12

2. Side Sitting

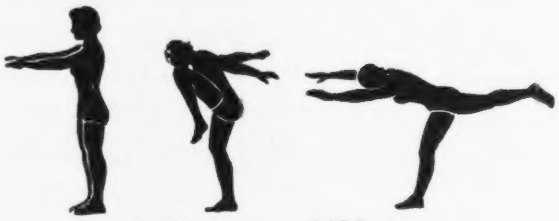

1-2-3-4-5-6
1-2-3 swing towards side
4-5-6 back to starting position
repeat elevated on knee with leg extended in back

3. Some Standing Starting Positions



Long Lunge Stride

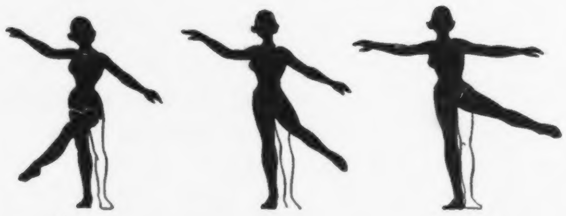
4. Balance Technique



1-2-3-4
Touch knee to head

5-6-7-8
Balance with leg extended in back

5. Leg Swing from Hip

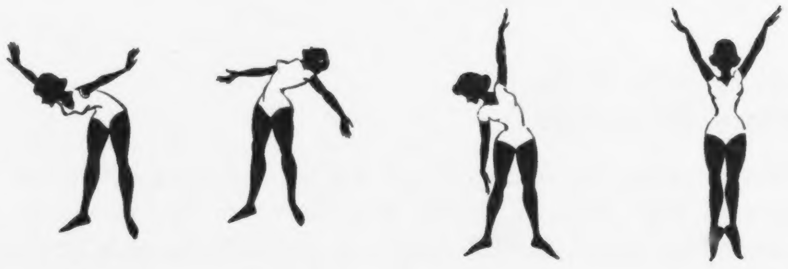


1-2
swing leg forward

3-4
swing leg back

5-6-7-8
extend leg to side and hold

6. Bounces and Stretches



Forward bending and bouncing

Backward bouncing

Stretching to the side

Stretching up on toes

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Fundamental Movements

Dance consists of the fundamental or natural movements of man. This includes locomotive and axial movements. Use these constantly in teaching to develop them.

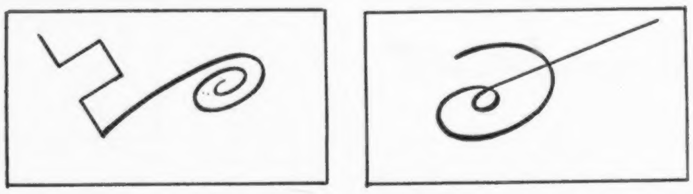
1. Locomotive Movement Run—leap—hop—skip—gallop—jump—slide	Technique Example: Have students combine 4 runs, 4 hops, and 4 jumps together. Or do run, run, run, leap to 4/4 rhythm.
2. Axial Movement	Technique Example:
Sustained	Movement is smooth, uninterrupted. A spoke spiral is a good example.
Percussive	Dodging, throwing, jumping, and kicking are examples. Movement starts with much force and quick contraction.
Pendular (swings)	Swinging arms, torso, legs — forward, backward, sideways, in circles, etc.
Vibratory	When percussive movements occur in quick succession, a quivering and shaking pulsation results. Often seen in primitive rituals.
Collapse or Relaxing	Starting in a position of complete extension with arms over head, relax successively the fingers, wrist, elbows, head, shoulders, waist and knees.

Falls, twists, drops, strikes, etc.

Spatial Relationship Suggested Activities

Spatial relationship is concerned with the dancer or group of dancers and that area in which they move or are confined. A dance must have good spatial design to give clarity and strength to the idea or theme. The following spatial elements make up the fundamental principles of modern dance.

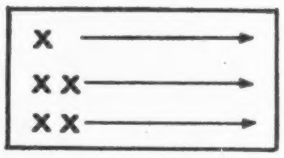
1. Floor Pattern—the imaginary designs made on the floor by the dancer moving from one place to another.
   Examples:



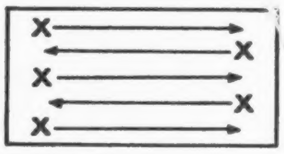
   a. Supply music of different moods. Have students draw abstract lines according to how they feel when listening to this music. Use results as floor pattern.
   b. Prepare paper with dots or figures. Encourage students to use their imagination to draw connecting lines which will form a floor pattern. Use results as a floor pattern for a composition.
2. Direction of the dancer through space. The dancer may move forward, backward, sideways, diagonally, circularly, up, or down. Combinations of these may result in squares, arcs, zig-zag lines, etc.
3. Level movement may be presented:
   a. On different levels or heights
      (1) on the floor
      (2) sitting
      (3) kneeling
      (4) standing
   b. In different planes
      (1) movements horizontal to the floor
      (2) movements vertical to the floor
4. Dimension. Movement may be presented in varying dimensions. These movements may be from small to large, large to medium and may even be exaggerated movements. The dimension of movement depends upon what the dancer wants to express.
5. Focus. Movement implies a change of position and therefore direction and focus are involved. A conscious focus or central point of consideration is necessary if a movement is to be forceful and arresting. For example, a dancer may focus on a beautiful rainbow or tree as she dances.

6. Group Relationship. Movements must be considered in relationship to other figures or groups in space. Group movement may be presented in:

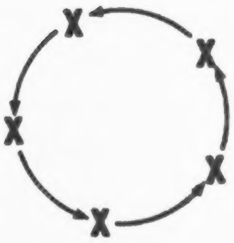
   a. Unison
      (All moving one way)



   b. Opposition
      (Moving opposite ways)



   c. Succession
      (One after the other)



Creativity through Class Experiences in Spatial Relationships

The following suggestions will help the student become more creative. The teacher should direct, stimulate, motivate, and help students in creating, but never dictate. Act as a guide and help the students to evaluate their work. Working together in groups also helps the student.

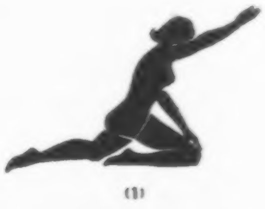
1. Experiences in Dimension
   a. Give a movement theme. Vary it in space by presenting it in as large, then as small, a range as possible.
   b. Two groups—second group answers first by enlarging the movement phrase to its largest scope.
   c. Locomotor activity. Cover floor space in 16 skips. Diminish the size by covering the floor in 32 skips across small area. Enlarge range by covering same space in 8 large skips.

d. Assign students to make patterns of movements using the basic locomotive movements. Example: Use eight counts, (consisting of 2 walks, 1 leap, 1 walk, 2 jumps, and 2 slides.) Then try them with suitable music or a drum beat.

2. Experiences in Direction
   - a. Emphasize changes in direction by walking in a different direction at a time indicated by a drum accent.
   - b. Draw a design (floor pattern) on the board. Walk through the pattern on the floor.
   - c. Have students let a string fall to the floor. Trace outline of the string and use this as a floor pattern.
   - d. Ask students to plan movements using different directions in space.

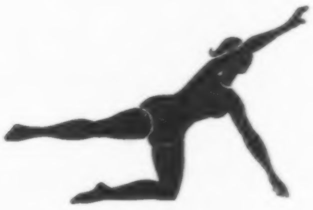
3. Experiences in Level
   - a. Compose and present a movement sequence or exercise on different levels.

(1) On a low level (sitting or lying)



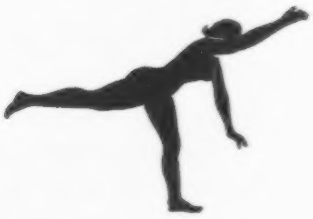
(1)

(2) On a medium level (kneeling)



(2)

(3) On a high level (standing)



(3)

b. Plan some movements, letting students try them on different levels. Then divide students into four groups, each representing a level. Using suitable music, have students execute planned movements.

4. Experiences in Focus
   a. Focusing on one given point throughout the dance.
   b. Focusing always in the line of direction of movement.
5. Give students one movement theme. Let them vary it by experimenting with:
   a. dimension and level.
   b. direction and focus.
   c. dimension, direction, level.

Creative Activities

In composing a dance, all elements of the dance are indicated. The following is a suggested guide for creating a dance.

1. Select and discuss the different possibilities of the theme. Source of theme may be obtained from:
   a. Intriguing piece of music.
   b. Poems or rhythm.
   c. Variations on traditional dance steps.
2. Select music, percussion instrument, or poem.
   a. Listen to entire piece several times.
   b. Phrase music A, B, C, D, etc.
   c. Count numbers of measures in each phrase.
   d. Determine time of music, rate of speed, etc.
3. Discuss the music in relationship to the theme.
   a. Decide type of movement in relationship to phrase and theme.
   b. Select several movements that express the quality of the theme or story. Remember that you are trying to tell someone else a story, so your movements must convey the idea clearly and directly.
4. Develop fundamental principles of modern dance.
   a. Use the fundamental movements—locomotive and axial.

   b. Use spatial relationship—floor pattern—direction—level—dimension—focus—group relationship.

5. In order to be a composition a dance must have
   a. unity
   b. contrast
   c. climax
   d. repetition

Check progress during each period and correct mistakes, criticize, and analyze. Do not be satisfied with first efforts. Explore!

Teaching Suggestions

1. Avoid equipment that might cause injury.
2. Keep the gym or room well-ventilated.
3. See that appropriate costuming is observed. Leotards should be worn, but gym suits may be substituted. Shoes should not be worn unless the floor is unsuitable. When dancing, sandals or soft pleated-toe ballet slippers may be used.
4. Group students according to ability and, whenever possible, use them for demonstrations.
5. Use warm-up exercises before the presentation of each class activity.
6. Create an informal atmosphere so that students will be relaxed.
7. Take part with student groups at times to stimulate interest.
8. Make lesson plans and do most of the teaching verbally.

Evaluation

Skill tests should be graded on a technical basis. The degree of excellence of performance would have to be set by the standard of the teacher and/or students.

The skill test should be on basic movement: combinations and variations.

1. Locomotive and axial
2. Technique patterns such as:
   a. Bounce leap
   b. Run, run, leap

    c. Swing, fall, lift
    d. Skip, walk, push

3. Floor and standing warm-ups

Written tests should include material covered during the unit—for example:

1. History of dance
2. Rhythms
3. Concept of dance technique—posture
4. Dance as a creative art
5. Form in dance
6. Dance fundamentals—time, space, and movement
7. Dance composition
8. Standards and evaluations of group and individual patterns

CHART XI
MODERN DANCE RECORDS

TITLE OF RECORD ALBUM	ARTIST	TYPE OF ACTIVITY USED FOR	RECORD NO. & CO.
Motivations for Modern Dance	Ruth White	Composition	LB 3312 Lyons
Key Notes to Modern Dance	Calb Heiden	Fundamental and intermediate locomotor movements	610 Childrens' Music Center, Inc.
		Qualities of movements traditional forms: musical forms Pre-classic suite	611 Childrens' Music Center, Inc.
		Advance development of rhythm Compositions	612 Children's Music Center, Inc.
Music for Techniques	Betty King and Medeline Nixon	Axial and locomotor techniques	502 Children's Music Center, Inc.
Music for Composition	Betty King and Medeline Nixon	Composition	503 Children's Music Center, Inc.
Music for Rhythms and Dance	Frieda Miller	Fundamental Activities	LB 3355 Lyons
Accompaniment for Techniques	Frieda Miller	Moving in space and time	LB 3356 Lyons
Second Album for Dance	Frieda Miller	Techniques and composition	LB 3357 Lyons
Third Album for Dance	Frieda Miller	Composition, improvisions, and performance	LB 3358 Lyons
Dance Rhythms	Classroom Materials Series	Warm up exercise on floor	LB 3359 Lyons
Introduction to Modern Dance	Classroom Materials Series	Warm up exercise for head, arms, feet, etc.	LB 3360 Lyons
Creative Dance, Vol. I	Classroom Materials Series	Walk and run	LB 3365 Lyons
Creative Dance, Vol. II	Classroom Materials Series	Dance techniques—improvisions and variations	LB 3366 Lyons
Creative Dance III	Classroom Materials Series	Improvisations and dance study	LB 3516 Lyons
Creative Dance IV	Classroom Materials Series	Rhythmic patterns	LB 3517 Lyons
The Fundamental of Music For Dancers	Ruth White	Short lecture with examples melody, counterpoint, harmony and time.	LB 3371 Lyons
Dance Play I & II	Sally Tobin Dietrich	Fundamental locomotive movements	No. DPI & No. DP2 Lyons
Rhythms and Meter Appreciation	Living with Rhythm	Fundamentals of music	RR 3
Modern Dance and Modern Jazz	David Harris & Peter Gladke	Instrumental selections	LB 3030 Kimba
Dance — Modern; Ballet, Modern Jazz	David Harris	Creativity	

SOCIAL DANCE

Social dance is appealing to all ages and is becoming increasingly popular in the junior and senior high school. Many pleasant and enjoyable experiences are derived from the dance program. Much of the entertainment for a group of friends, for dating, or for partying centers around social dance. There is special value to students since it has a high carry-over value.

Etiquette

A gentleman should always thank the lady after he has danced with her, and she should acknowledge his courtesy.

A lady should never refuse a gentleman's invitation to dance without having a very good reason, in which case she should not accept another partner for the same dance.

A gentleman, when "cutting-in," should touch the shoulder of the partner of the lady with whom he wishes to dance. If he is not acquainted with the couple, he introduces himself to the gentleman, who then presents him to the lady.

A gentleman should never leave a lady unaccompanied on the dance floor. At the end of a dance, he may either introduce her to some other gentleman, take her to a group of her friends or to the hostess, or sit with her until the music starts for the next dance at which time he has the privilege of excusing himself.

As learning progresses, the selection of partners should be a part of the learning experience, and it must be emphasized that the opportunity for choosing one's own partner carries responsibility for selecting different partners frequently and of mixing with various members of the group. The shy, awkward students should be given the instruction they need, and the instruction given so that students will not be embarrassed in performing as they are instructed.

Social Dance Terms

1. *Break*—Indicates a "change" in the direction or step variation. A "forward break" means that the direction is forward, but there is going to be a change from that direction either backward or to the side.
2. *Corte or dip*—A magnified step forward (for women) or

backward (for men) with flexion of the knee. The other knee remains extended, toe pointed.

3. *Cross*—One foot moves to the opposite side, slanting in front of or behind the other foot.
4. *Draw*—A foot in open position is moved along the floor to a closed foot position. The toe or ball of the foot is usually the only part of the foot that touches the floor.
5. *One step*—A walking step done in one count of 4/4 music, usually relating to the quick part of a rhythm pattern.
6. *Recovery*—The step in place taken by the extended foot, followed by a dip.
7. *Reverse*—Dance the same step pattern but begin with the opposite foot.
8. *Rock*—A step to the back followed by a slight swinging motion.
9. *Step*—A walk.
10. *Toe-in*—A walking step with toes turned away from the midline.
11. *Toe-out*—A walking with the toes away from the midline.
12. *Touch*—No weight is on the foot, but the ball of the foot touches the floor lightly.

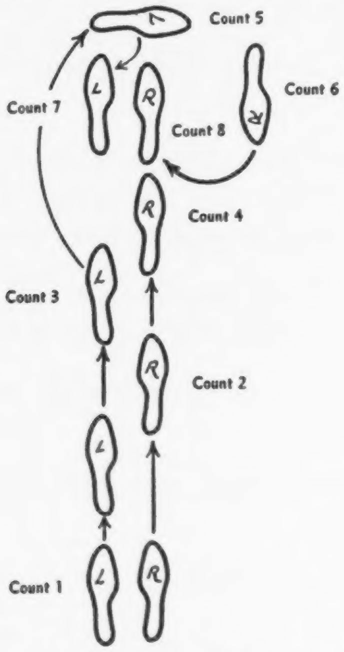
Social Dance Steps

(The descriptions are given for the boy's part).

1. *One-step* (*Walking step*) to different meters—2/4, 3/4, 4/4

The one-step is a simple pattern of walking one step to every beat of the music. The rhythm of the one-step is similar to that of a brisk march with four beats to a measure and with an accent on each beat. A one-step dance to slow fox trot music is sometimes called a walk step. When the walk step is done in time with fox trot music, the step is taken on counts one and three which are the accented beats in the music.

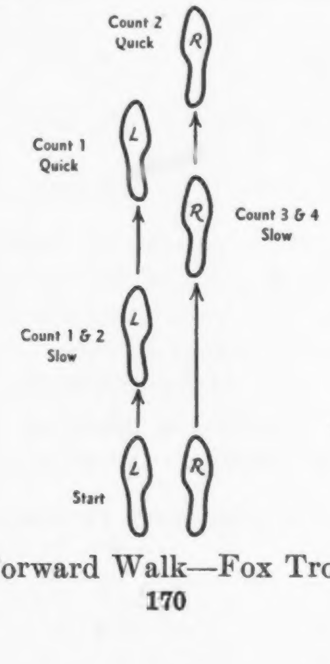
Performing four slow walk steps forward, followed by a four-count pivot turn, is a pattern of one step illustrated below.



Forward Walk and Pivot Turn

2. *Fox Trot* (*Two-Step*)—4/4
Music: Suggest "Tea for Two."
Description: Simple forward fox trot

Step forward left	Count 1 and 2 (slow)
Step forward right	Count 3 and 4 (slow)
Step forward left	Count 1 (quick)
Step forward right	Count 2 (quick)



Forward Walk—Fox Trot

Description: Forward fox trot side-close step

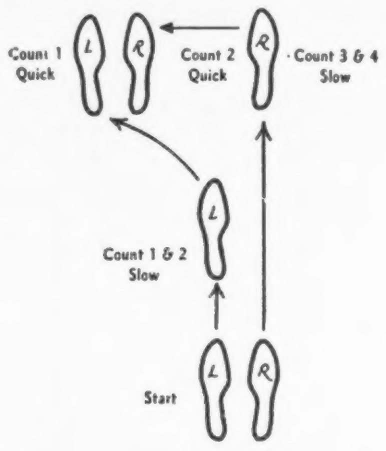
Step forward left	Count 1 and 2 (slow)
Step forward right	Count 3 and 4 (slow)
Step *sidewards* left	Count 1 (quick)
Close right to left	Count 2 (quick)

Have the floor pattern worked out on the floor. Stand in front of the class with your back to them and have them follow you as you do the step. Then do the girl's part which is just the opposite for forward and back, left and right. Put the following boy's parts on the board:

a. Step forward on left foot, slow (2 counts).

b. Step forward on right foot, slow (2 counts). Draw left foot up to right—follow dotted line).

c. Step to left with left foot, quick (1 count).



Fox Trot Side-Close Patterns

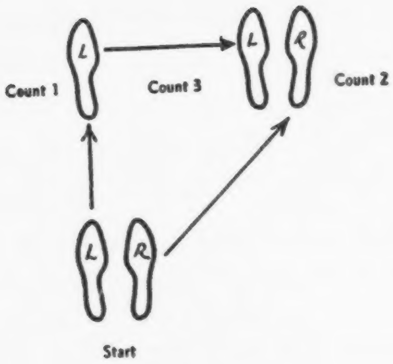
d. Close right foot against left foot, transferring weight, quick (1 count).

3. *Waltz Step*—3/4

Description: Simple waltz step

Step forward left	Count 1
Step to right side with right foot	Count 2
Close left to right—take weight left	Count 3

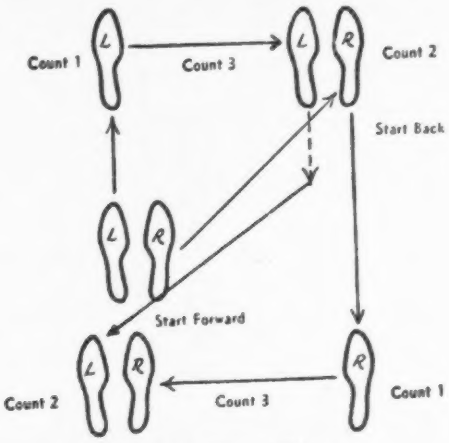
Feet are always together on count of 3.



Waltz Step

Description: Waltz box step

Step forward left	Count 1
Step sideward right	Count 2
Close left to right—take weight left	Count 3
Step back right	Count 1
Step side left	Count 2
Close right to left—take weight right	Count 3



Waltz Box Step

4. *Rumba*—4/4

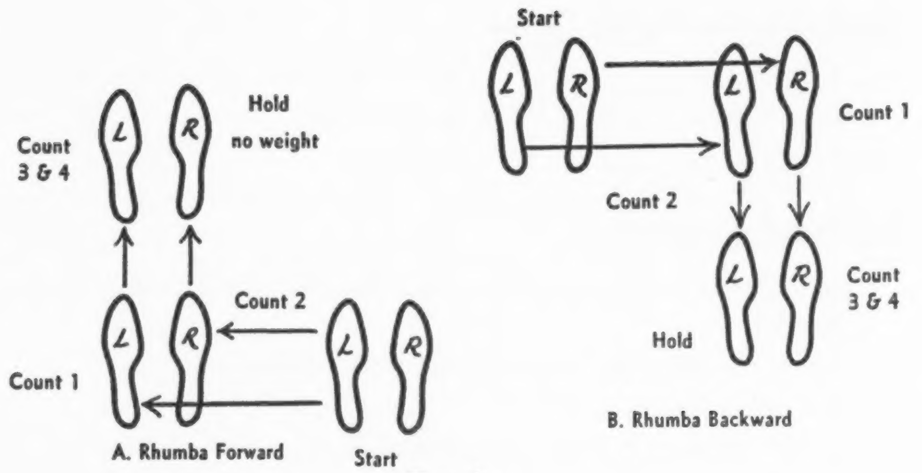
Description: Rumba forward

Step sideward left	Count 1 (quick)
Bring right foot next to the left and step	Count 2 (quick)
Step forward left and hold	Count 3-4 (slow)

(Bring right foot next to the left but do not take weight)

Description: Rumba backward

Similar to forward step, but it is taken with the opposite foot starting right.



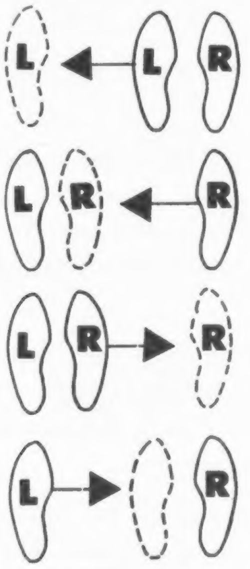
Rumba

Variation:

Step forward left	Count 1
Step sideways right	Count 2
Bring left foot next to right and step forward	Count 3
Hold	Count 4

5. *The Bossa Nova*

To the United States, the Bossa Nova is relatively new. It has long been a popular dance in Brazil. It is classified as more of a musical style than dance. The samba beat, using the style of modern jazz, is featured in the Bossa Nova.



Bossa Nova

Other Social Dance Steps

1. Charleston	4. Mambo
2. Cha Cha	5. Samba
3. Lindy	6. Tango

Teaching Suggestion

1. Select music that is appropriate for the specific dance to be taught.
2. Create a relaxing atmosphere in the classroom.
3. Demand discipline.
4. Demonstrate and use visual material in instruction.
5. Teach each type dance, first using the part, then the whole method.
6. Make sure the room or gym is well-ventilated.
7. Have students practice steps individually in all directions, then practice standing side by side without being in dance position.
8. Teach boys to lead off with left foot moving forward. Girls start with right foot going backwards.

Mixers

Mixers may be used as motivations in teaching social dance. They serve as means of relaxing and making the student feel at ease.

The following methods for securing new partners may be used for mixers.

1. *Reverse Circles*—Ladies join hands and form the inside circle. Gentlemen join hands and form the outside circle. Gentlemen move to the right, ladies to the left. When the music stops, the circles face and each gentleman dances with the lady in front of him.

2. *Huddle*—Ladies join hands in one large circle. Gentlemen form a huddle in the center, heads bent forward. Ladies circle to the left. At a signal, they rush to the center and each taps a gentleman on the shoulder.

3. *Flashlight* (the room should be dark). A flashlight is given to a gentleman without a partner. He moves about the dance floor, flashing it on and off and looking for the lady with

whom he wishes to dance. When he finds her, he gives the flashlight to her partner, who goes in search of another lady.

Class Organization for Mixed Groups

1. *Lines* (side-by-side)
    a. Single—all moving in the same direction.
    b. Double—gentlemen and ladies facing. Gentlemen move forward, ladies move backward. It is helpful to have an assistant dance in front of one line, while the instructor dances in front of the other.
2. *Circles*
    a. Single circle—all moving in the same direction.
    b. Single circle with partners—gentlemen moving forward, ladies' circle moving backward. Partners hold elbows.

The social dance position should be demonstrated and eplained by the following directions:

1. Stand comfortably and naturally erect, facing partner who is directly in front.

2. The boy's arm with elbow raised away from the body is placed around the girl's left side with hand resting near the center of the back and just below shoulder blade.

3. The girl's left arm rests on the boy's right arm with her left hand resting on his right shoulder.

4. The boy's left arm is extended sideways in an easy position with elbow away from the body, palm of hand turned slightly up.

5. The girl's right arm is extended sideways and the right hand is placed in the boy's left hand, but well-supported by the girl.

6. The girl should remember to carry her own weight and not lean on the boy for support.

Grand Marches and Other Party Dance Activities

The grand march is a very interesting activity which can be used for large groups. It can also be a main attraction of the dance or social affair. The success of an unrehearsed grand march is the leader. He should be familiar with the type of figure or formation to be done. Two formations that could be used are the platoon and the serpentine.

XV
Chapter

Intramural and Extramural Programs

The physical educator should readily understand that there is a place in the program for the teaching of physical skills, intramurals, extramurals and varsity sports. The responsibility rests upon him for knowing that these phases of the program are not one and the same.

Objectives

1. Provide opportunities for the application of skills learned in regular physical education classes in actual game situations.
2. Development of accepted social and moral values through observing and exemplifying desirable sportsmanship.
3. Development of self-direction and student leadership through responsibilities in the control and management of the activities.
4. Development of strength, endurance, and neuromuscular coordination.
5. Development of group loyalty and school morale.
6. To provide the students opportunities for fun and enjoyment.
7. To provide students with an opportunity for satisfaction and a feeling of achievement through participation in competitive situations.

Intramural Program

The word "intramural" is a derivation of the Latin words intra, meaning within, and muralis, meaning wall. It has been closely associated with other words such as sports, athletics, and activities. When combined, it implies a program of sports and other activities conducted within the walls or imaginary boundaries of a particular school. The term intramural sports is generally accepted as the best title for recreational sports and activities promoted within the confines of a school and under its jurisdiction.

Equipment

Every effort should be made to provide the necessary equipment for the activities offered in the program. The following recommendations are worthy of consideration.

1. Funds for equipment should come from the general school budget and should be governed by policies applicable to other instructional areas.
2. Equipment should be available in sufficient quantity and quality to insure the safety and success of the program for both boys and girls.

Extramural Program

The extramural program provides students with an informal interschool experience that will satisfy the needs and interests of students who do not participate in varsity or junior varsity activities.

Extramurals are a phase of the physical education program in which students or teams from different schools compete. The extramural program should grow out of the instructional and intramural programs and should not detract from either. Both individual and team activities may be included in the program.

Activities

In selecting sports, the size of the school and age of students should first be considered, and then attention should be given to local facilities and preferences. A few sports well promoted will constitute a better program than a hodgepodge of many sports which are not popular enough to warrant encouragement. Activities may be selected from the following comprehensive list:

INTRAMURAL ACTIVITIES

	BOYS		GIRLS		CO-RECREATIONAL	
	TEAM	INDIVIDUAL	TEAM	INDIVIDUAL		
F A L L	Cross country Field hockey Flag football Soccer Speedball Tennis	Archery Golf Handball Horseshoes Paddle tennis Quoits Tennis	Field ball Field hockey Kickball Soccer Speedball Tennis	Archery Golf Horseshoes Paddle ball Quoits Tennis	Golf Kickball Modified games Paddle tennis Relays Tennis	Archery Golf Horseshoes Quoits
W I N T E R	Basketball Gymnastics Tumbling Volleyball	Aerial darts Badminton Basket-Shooting Bowling Deck tennis Fencing Handball Riflery Shuffleboard Table Tennis Wrestling	Basketball Bowling Fencing Gymnastics Shuffleboard Tumbling Volleyball	Aerial darts Badminton Basketball-Shooting Bowling Fencing Riflery Shuffleboard	Badminton Deck tennis Modified games Volleyball Tumbling	Aerial darts Basket-Shooting Bowling Fencing Shuffleboard Table tennis
S P R I N G	Golf Softball Swimming Tennis Track and Field	Archery Golf Handball Horseshoes Paddle tennis Quoits Tennis Casting	Golf Kickball Relays Softball Swimming Tennis Track and Field	Archery Golf Handball Horseshoes Paddle tennis Quoits Tennis Casting	Golf Kickball Handball Paddle tennis Relays Softball Tennis	Archery Casting Horseshoes Quoits

Principles for Organizing Extramurals

1. Neighboring schools participate.
2. Participants should be fairly matched as to age, experience and ability.
3. Length of sports seasons should be limited and number of practice periods and games held to a minimum.
4. All details should be checked and plans made to avoid confusion, loss of time, or lack of equipment that might prevent smooth functioning and enjoyment of the program.
5. Provisions should be made for first aid emergencies.
6. Expenses should be held to a minimum.
7. Medical screening is advisable.
8. Adequate transportation, supervision, and protection of students should be provided by the local school board.
9. All interschool activity must be conducted according to rules and regulations of the South Carolina High School League.

Types of Extramurals

Play Day — Emphasis is placed upon participation for many players, usually in a variety of activities. Divide up the various teams so that there are no representative school teams, thereby reducing the competitive element. Teams are composed of representatives from the various schools.

Sports Day — Events are scheduled between two or more schools, but without extensive coaching as in the varsity competition. Several events may be included provided a number of schools are participating. There are no significant awards for the various events and publicity is kept to a minimum.

Telegraphic and Mail Meets — Teams from various schools compete by conducting the activity in their own locations. The records are sent to a central committee for comparison and schools are notified of the winners.

Chapter
XVI

Evaluation

Americans, probably more than any other nation of people, want to know "how much," "how many" "how far," "how long," etc. Americans want to know what measure of output they are getting from the thing into which they have put their money, time, or effort. Accounts and records are meticulously kept on output *vs* intake and on investment *vs* return. Specific standards and measurements are set up so that efficiency or effectiveness can be determined. If an investment does not produce the expected return, it is cancelled or converted and something better is considered.

Do those in education, and more specifically those in physical education, exhibit concern for "how much," "how many," "how far," "how long," etc.? Do they compare investment *vs* returns? Do they set up standards toward which to work to facilitate determining effectiveness and efficiency? Do they try for better methods when original efforts fail to produce?

The goals of education have been clearly defined, and the unique contributions which physical education can make to these goals have been determined. Physical fitness, neuromuscular skill, strength, agility, flexibility, endurance, balance, knowledge or information, social maturity, appreciations, and recreational adequacy are familiar terms to the physical educator.

The standards are set; the expectations are clear. Are physical education teachers meeting these? Does each physical education teacher have evidence available to prove conclusively that these objectives are being met, not by a few students, but by every boy and girl who is receiving an education? Until such is the case, physical education cannot hold a highly respected position in the field of education. It must produce if it expects to be retained and respected as a vital part of the education of American youth.

Many teachers shy away from such terms as evaluation, testing, measurement. They feel that they are inadequately prepared or that such activities require too much time. Neither need be true; in most situations, a teacher has to evaluate the student regardless of preparation or time. When the student's work is measured and evaluated, the result indicates the value of the program and the value of the teacher.

Thus good testing is teaching in which the results indicate each student's strengths and weaknesses and the strengths and inadequacies of methods and materials.

Every alert teacher will want to employ testing as one of the means for improving his or her effectiveness in meeting the objectives of the physical education program.

What should be measured?

1. The student
    a. Status at specific times
    b. Progress over a given period of time
    c. Individual needs, interests, and ideals
2. The curriculum
    a. Progress
    b. Values
    c. Weaknesses
3. The teaching
    a. Degree of vitality or interest
    b. Effectiveness

The Approach

Since the center of the school is the student, all programs should develop around him.

What does the physical education teacher need to know about a student? The teacher needs to know the student's level of physical, emotional, and social maturity when the student reports for his first class. More specifically, the teacher needs to know what skills the student has. The teacher needs to know how each student works in a group, whether the student is accepted or rejected. The teacher needs to know each student's attitude toward physical education and physical activity.

In many situations each student has one cumulative record in the office of the principal or guidance counselor. This record will give much vital information on a student. It is the responsibility of the physical education teacher to be familiar with this information at the beginning of a session.

If certain information is missing, then some method must be provided for obtaining it. Physical exams can be arranged through the school nurse, doctor or the county health department. Any teacher can get a good picture of the social status of members of a class by making a sociogram. Body mechanics tests or general motor ability tests give the teacher an idea as to the degree to which the student has met the unique objectives of physical education. Attitude scales are available and can be applied in a short time. Tests for specific skills and abilities have been suggested in other sections of this *Guide*.

How to Use Information

Once the teacher has this background information, the student's needs and interests can be diagrammed; the students can be classified, guided, and motivated according to needs and interests; and interest groups can be planned to meet the needs. By testing periodically, the teacher can determine the student's progress, make an analysis of the effectiveness of teaching method and material, and evaluate and revise the curriculum.

How to Select Tests

What makes a test a good test?

1. Practicality in specific school

No matter how good a test may be in results, if it requires space which is not available, it cannot be used. If the test requires equipment which cannot be made or obtained by the school, then the test is not practical for that school. If the time necessary to test all students is not scheduled, then the test cannot be given.

2. Statistical soundness

In many tests, numerical coefficients are reported to indicate how reliable, valid, and objective the tests are. These numbers simply show whether or not the same score will be made by a person who is tested over and over (reliability), whether or not the test really measures that ability which it claims to measure (validity), and whether or not a student tested over and over by different teachers would make the same score on the test (objectivity).

The numbers are not always reported, but when they are reported, one can be sure of the statistical soundness of the test. The following breakdown of coefficients can serve as a guideline:

Validity		Reliability & Objectivity
.85-99	High	.90-.99
.80-.84	Good	.80-.89
.70-.79	Fair	.70-.79
.60-.69	Poor	.60-.69

When these numbers are not reported, it does not mean that the test has no value. If these items are not reported, the teacher will have to study the test and draw his own conclusions as to the value of the test. If it looks as though it will meet his need, then he should use it.

3. Norms (scale)

Many tests have been given to large numbers of high school students who represent a cross-section of all types of high school students. The reason for such mass testing is to develop norms. A norm is a standard of achievement. (See appendix C for transposing norms to letter grades.)

Skill Measurement

The AAHPER is currently conducting the National Sports Skills Test Project which will offer tests that best measure skills in 15 sports. National norms expressed in percentile scores are being established in each activity for boys and girls ages 10-18. The basketball and softball manuals are now available for both boys and girls, and the football manual is available for boys.

Other sources for locating skills tests would be measurement books and periodicals. For activities that do not have standardized skills tests available, teacher-made tests are very useful. The following suggested procedure can be used. Tests are available in basketball, but it will serve as a useful example.

1. Decide the purpose of the test; in basketball, for example, it is to rate students' ability to play basketball.

2. Decide what skills are basic or most important to a good player, for example: (1) passing and catching, (2) dribbling, (3) shooting, (4) running for speed.
3. Select items which will include these skills. Suggested items and scoring:
   a. Repeated passing against a wall for 30 seconds. Score: number of completed passes made.
   b. Dribble from a starting point, around two chairs, and back to starting point. Score: time required from start to finish.
   c. Ten free shots. Score: number baskets made.
   d. Running the length of the court. Score: time required.
   e. Or use a combination test—run from one free throw line to center circle, pick up a ball in the circle, dribble in and out between three chairs six feet apart, and on to the basket for a lay-up shot. Score: time from starting signal to release of ball for shot. If basket is made, subtract three seconds. Repeat and total time for two trials.
4. Validate the test.
   a. Compare test score with proof of skill, that is, won-loss records. Playing a round-robin tournament will show whether or not the test is good enough to predict the best team. For individual and dual sports, a valid test of skill should correlate well statistically with the final ranking of a ladder tournament.
   b. Another method of validating a test is to compare it with the ratings of expert judges. You may use single rating as rendered in a typical rating scale, or a combined rating of judges as utilized in competitive diving.

If this test proves satisfactory, it can be used in subsequent classes to measure ability. Give the test at the beginning of the season (pre-test) and again at the end of the season (post-test). The degree of progress which each student has made will be known by comparing his two scores.

In pre-testing and post-testing, the teacher can see which skills he was most successful and least successful in teaching. From this, future instruction can be improved.

General Motor Ability Measurement

Running is easily tested by time in dashes, shuttle runs, dodge runs, distance running, and obstacle runs. Throwing is measured by distance throws, repeated throws in a given time, target throwing and fielding, and basket shooting. Jumping ability is tested by distance on the standing broad jump, running broad jump, or vertical jump. Striking or hitting skill is measured by the number of repeated volleys or kicks in a given period of time. Balance is measured by timing students on any one of several stunts: (1) Tape one foot of 1″ x 1″ board to the floor. Have the student stand on this on his left foot, close his eyes, and hold position. Score time up to ten seconds which balance can be held after eyes are closed. Repeat on right foot. (2) Have student stand on right foot, place instep of left foot against inside of right knee, close eyes, and hold position. Score time up to ten seconds which balance can be held after eyes are closed. Repeat on left foot.

Knowledge Measurement

Knowledge tests are as essential in physical education as in any other school subject. The AAHPER is currently conducting the Sports and Physical Education Knowledge Test Project which will concentrate on the knowledge and understanding boys and girls should have at each grade level from fourth through the twelfth grades. No publications are available from this project at this time. Knowledge tests are available for many activities in the current literature. For activities that do not have suitable tests available, teachers should develop their own tests.

Knowledge can be appraised in different ways, but the written test is accepted as the most objective and practical method. Written tests can be essay type or objective type. The essay type is more difficult to correct and rate. The objective or short-answer type can sample a wider range of subject matter, increase the reliability of the grade, permit quick grading and computation of scores, and eliminate a handicap on the pupil who writes slowly or expresses ideas poorly.

There are several types of objective questions:

1. True-false (alternate response)

Use this type when you must cover a large amount of information; when you must economize on the number of pages of typing and still cover a large range of material; when the emphasis has been on the difference between factual and erroneous materials, unless false information is dangerous. Scoring is usually done by subtracting the wrong from the right answers. This type of test is weak unless 75 or more questions are used.

2. Multiple choice

Use this type when many alternatives are possible, but some basis exists for superiority of one; when students can be expected to differentiate between closely related points; when amount of typing and number of pages are important. The score is usually the sum of the correct responses. A common form is the question followed by three to six choices. One form of the multiple choice is the matching type of test, sometimes called the "who, what, when, where" question. This type is weak in measuring interpretative abilities.

3. Recall (short response associated with question)

Use this type to obtain factual information, identification of terms, etc. The score is usually the sum of correct responses. This type is sometimes difficult to grade and analyze.

In making original tests, there are a number of points which the teacher should keep in mind.

a. Make a check list of areas to be covered by the questions.
b. Decide the kinds of questions and how many of each kind can best test the various areas.
c. Decide what percentage of the total examination will be devoted to each area to be tested.
d. Prepare instructions and samples for each section of the test.
e. Plan length according to time available for test.
f. Arrange questions from easy to hard.
g. If test covers several sports, separate by sports.
h. Adjust the difficulity of the test to the ability of the group.
i. Prepare typist's copy. Decide whether separate answer sheet or test copy is to be used for responses. If test copy is to be used, provide space for name of student. Specify for the typist how many spaces are to be left for answers. Put instructions and questions on the same page. Proofread stencils and correct before the test day.
j. Make answer keys.

Preparation and Follow-Up of Tests

For both written and skill tests a certain amount of preparation is necessary.

1. Select best test available for purpose or make one's own test.
2. Collect and prepare all needed equipment and markings for safety at least a day before test day.
3. Train all assistants and scorers.
4. Prepare score sheets so that the results can be quickly computed.
5. Plan and practice presenting directions to class. Directions can be typed and posted as well as read to class; this is particularly true in testing skills.
6. Plan time and instructions for warm-up if skills test is strenuous.

Testing without follow-up may have some meaning for the instructors; but unless students are given the benefit of knowing and understanding test results, they are apt to feel that the test was merely time wasted or the teacher's way of getting a grade to put on a report card.

1. Explain meaning of the scores.
2. Help students understand weaknesses (as revealed by the test) and methods of overcoming them.
3. Be sure to give test results a *few days after testing.*
4. Use scores for specific purpose for which test was given, such as classification, guiding students, revision of teaching methods or materials, motivation, or grading.
5. Evaluate or consider the value of such testing.

Application of Testing Data

Data obtained from various kinds of tests can be used for several purposes:

1. Grading

In most instances, human qualities or characteristics vary from one individual to another. For example, all 12-year-old boys are not the same height. Some are very tall, some very short, and the majority average. This is called a normal distribution of curve.

Physical skills and abilities are normally distributed; thus some students will be low in skill, some high, but the majority will be average. When students are evaluated in physical education and grades are assigned, it is natural to expect some to get low grades, some high grades, and the majority to get an average grade.

Distribution of grades depends on the individual teacher's philosophy or the department policy. It is not the purpose of this guide to go into detail concerning educational statistics but, based on the mean and standard deviation, the following distribution of grades is suggested:

7% — A
24% — B
38% — C
24% — D
7% — F

For example, two soccer classes with a total of 70 students are given a test. The grades should be approximately:

4-5 — A
16-17 — B
26-27 — C
16-17 — D
4-5 — F

It is recommended that the following items and percentages be considered in developing final grades at the end of a reporting period:

1. Skills testing	20%
2. Evaluation of performance: rating scales, competitive performance, etc.	30%
3. Knowledge of rules and strategy	20%
4. Social attitudes: including cooperation, sportsmanship, leadership and meeting standards set up for the class, etc.	10%
5. Physical fitness testing	20%
TOTAL	100%

2. Student self-understanding

If objective measures are made of the student's knowledge and ability, and if he is rated with others of his own grouping, he will see where he stands. A good teacher can help the student see his strengths and weaknesses from these scores.

3. Classification or grouping

The results of health examinations or medical examinations can help to classify students for active, semi-active, or inactive work. Motor ability tests clasify students for work requiring various degrees of motor skill. Students with low motor ability need special work in developing the basic skills before they can be expected to experience success in more highly skilled activities, such as basketball and soccer.

4. Teacher evaluation

The level of skill and knowledge attained by students can be compared with the standards set by the teacher at the beginning of a class. If there is too great a difference between the level of attainment and the standard, then the teacher should analyze the methods and materials used, in an attempt to draw the two closer together. The standards may be too high, the students may not have been motivated, the materials may not have been presented in a clear manner, etc.

5. Curriculum evaluation and revision

Data obtained from testing programs indicate the degree to which the objectives of physical education are being met by the program. If test scores do not present a normal curve or distribution, standards may be too high or too low, teaching may be inadequate, equipment and facilities may be inadequate, teaching time may be too short, etc.

If test scores do not indicate an improvement in general qualities, such as motor ability or physical fitness, then the program may be overloaded with one type of activity. Some investigation may be necessary of a student's being excused from activity more than a certain number of times per season, the repetition of the same course, or the number of students per class, etc.

APPENDIX A

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American Squares, 121 Delaware Street, Woodbury, New Jersey.
Burns Record Company, 755 Chichadee Lane, Stanford, Connecticut.
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Chartwell House, Inc., 112 East 19th Street, New York, New York. 10003
Columbia Recording Company, Bridgeport, Connecticut.
Educational Activities, Inc. *Honor Your Partner*, Freeport, L. I., N. Y. 11520
Education Dance Recordings, Inc., P. O. Box 6062, Bridgeport 6, Conecnecicut.
Educational Record Albums, David McRay Co., Inc., 119 W. 49th St. New York, New York.
Evans Records, Chartwell House, Inc., 280 Madison Avenue, New York.
Folk Dancer Record Service. Square, Folk, and Contra Dances. P. O. Box 201 Flushing, Long Island, New York.
Folkraft Records, 7 Oliver Street, Newark, New Jersey.
Ginn and Company, 165 Luckie Street, N. W., Atlanta, Georgia. 30303
Henlee Squares, 152 Swall Drive, Los Angeles, California
Kimbo, U. S. A. Records, Box 55, Deal, New Jersey.
Kismet Record Company, Folk and Square Dance Records, 227 East 14th Street, New York, New York. 10003
Loskins Costume Center, 215 East 8th Street, Cincinnati, Ohio.
Laffy's Dance Record, 5960 Northwest Highway, Dallas, Texas.
Lyons School Catalog, 223 West Lake Street, Chicago, Ill.
Phonograph Record Sales, 157 Chambers Street, New York, New York.
Record Center, RCA Victor, 2581 Piedmont Road, N. E., Atlanta, Georgia 30324
Sing'n Do Company, P. O. Box 279, Ridgewood, New Jersey.
Sonart Record Corporation, 251 West 42nd Street, New York, New York.
Stanley Bowman Co., Inc., Valhalla, New York.
The Methodist Publishing House, Nashville, Tennessee.
Victor Records, Radio Corporation of America, Camden, New Jersey.
Windsor-Pacific Corp., Square Dance and Round Dance Records for Use in Schools, 5528 N. Rosemead Blvd., Temple City, California.

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American Association for Health, Physical Education and Recreation, 1201 Sixteenth Street, N. W., Washington, D. C. 20036
Athletic Institute, Chicago, Ill. 60654
Audio Visual Library, State Department of Education, Columbia. 29201
Audio Visual Aids Bureau, School of General Studies, University of South Carolina, Columbia. 29208
Coronet Instructional Films, Coronet Building, Chicago, Ill. 60600
Encyclopedia Britannica Films, 20 North Wacker Drive, Chicago, Ill. 60600
H. W. Wilson Company, 950 University Ave., New York, New York. 10052
Reed Co. Inc., Auburn, New York. 13021
Skan-a-Graf Posture Charts.

20809

Selected Physical Fitness Tests

1. Kraus-Weber—"Minimum Muscular Fitness Test"

   Ten test items (now six) were set up on a pass or fail basis. The authors agreed that the ability to lift a section of the body a specified number of degrees by a given set of muscles indicated enough muscle strength for daily living. One item, the famous or infamous "touch the hands to the floor", proposed to measure flexibility. This is the most controversial item on the test. One may be quite flexible in one area of the body and be completely inflexible in another.

   Source: Dr. Hans Kraus, 30 Central Park South, New York, New York 10019

2. Boys Clubs of America—A certificate test

   This test was designated to provide goals of fitness for boys, to motivate then to improve their own fitness level, and to give them a sense of pride and achievement in physical fitness.

   The test consists of:

   1. Sit-ups
   2. Pull-ups
   3. Push-ups
   4. Standing broad jump
   5. Vertical wayy jump
   6. Rope climb
   7. Indoor running broad jump
   8. Outdoor running broad jump

   Source: National Committee on Physical Programs, Boys' Clubs of America, 381 Fourth Avenue, New York, New York 10016

3. The AAHPER Fitness Test

   This test was designed for school use to determine the contributions of a physical education program to the development of all school-age children.

   The test consists of:

   1. Pull-ups for boys
      Flexed arm-hang for girls
   2. Sit-ups
   3. Shuttle run
   4. 600 yard walk-run
   5. 50 yard dash
   6. Softball throw for distance
   7. Standing broad jump

   Three aquatic tests:

   1. 15 foot swim
   2. 30 foot swim
   3. 100 yard swim

   Source: The American Association for Health, Physical Education, and Recreation, 1201 Sixteenth Street, N. W., Washington, D. C. 20036

4. President's Council on Youth Fitness

   This test was devised to screen out those school children who need immediate and remedial or spefific work to develop physical fitness.

   The test consists of:

   1. Pull-ups
   2. Sit-ups
   3. Squat thrusts

   Source: Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402

5. N.R.A. Tests

This group devised at least two tests "to increase participation, particularly among those youngsters whose physical skills are not in ratio with their interest."

Football test consists of:
1. Punting for distance
2. Drop or place kick for distance
3. Forward passing for distance
4. Snapping for accuracy
5. Drop or place kicking for accuracy
6. Forward pasing for accuracy
7. Punting for accuracy

Softball test consists of:
1. Base running for speed
2. Catcher's throw to second for accuracy
3. Catching fly balls
4. Bat for distance
5. Fungo hit for distance
6. Throw for distance
7. Throw for catch
8. Fielding ground balls
9. Pitch for accuracy
10. Throw for accuracy

Source: National Recreation Association, 8 West 8th Street, New York, New York 10011

6. YWCA Fitness Tests for Women

This test was designed to help women evaluate their physical efficiency."

This test consists of:
1. Stork test for balance
2. Wall test for back
3. 90 degree twist
4. Standing broad jump
5. Finger touch to toes
6. Fingers touching behind back
7. Push-ups
8. Sit-ups
9. Testing back muscles
10. Knee to forehead
11. 15 minute mile walk
12. Pinch test

Source: Bureau of Communications, National Board, Y.W.C.A., 600 Lexington Avenue, New York, New York 10022

7. Red Cross Swim and Stay Fit

"A project designed to contribute to the physical and mental fitness of the individual by providing an opportunity to participate in meaningful and enjoyable activity (swimming) over an extended period of time. Its goal is to improve the physical fitness of the swimmer; . . . it is meant to encourage regular swimming."

The test or plan consists of:
Starting at any desired distance, the swimmer swims a total of 440 yards during one visit to the facility. This is continued until he reaches a total of 3 miles, then 10, 20, 30, 40, and 50 miles. Pins, certificates, and emblems can be obtained for each of these achievements.

Source: Any local Red Cross Chapter or Mr. Arnold Wikenhofer, Director, First Aid and Water Safety Services, Southeastern Area, The American Red Cross, 1955 Monroe Avenue, Atlanta, Georgia.

8. Royal Canadian Air Force 5 BX Plan for Men, XBX Plan for Women (now being used by American military units).

   The plans were designed 'to tell you what to do, when to start, how fast you progress, and how far you should progress to achieve a desirable level of physical fitness."

   The material is too extensive to include in this paper. The purposes explain the content of the booklets.

   Sources: This Week Magazine, P. O. Box 77-E, Mt. Vernon, New York
   OR:
   RCAFPamphlet 30/2 AFP 50-5-2, Roger Duhamel, F.R.S.C., Queen's Printer and Controller of Stationery, Ottawa, Canada

9. Standards for Junior AAU Physical Fitness Tests.

   These tests were combined to measure the fitness of all areas of the body.

   Norms are available from 6-18 years.

   The test consists of:
   1. Sprints
   2. Walk and run
   3. Sit-ups
   4. Pull-ups
   5. Standing broad jump
   6. Push-ups
   7. Baseball throw
   8. Continuous hike for distance
   9. Running high jump

   Source: Amateur Athletic Union, 231 West 58th Street, New York, New York.

APPENDIX B

RECORD FORMS

All instructors have a professional responsibility for keeping accurate records on their students' health, physical fitness, skill testing and grading.

CUMULATIVE RECORD

Name .... Birth Date ....

Grades	7	8	9	10	11	12	Total
Attendance Days Absent							

Parents' Names ....

Address .... Phone No. ....

Health Record ....

....

....

Student's Doctor ....

Teacher's Comments ....

....

Mod = Modified Fitness Test

Event	7	8	9	10	11	12

7th Grade	8th Grade	9th Grade	10th Grade	11th Grade	12th Grade

The South Carolina Cumulative School Health Record (Form A), Revised 1962

This is a cumulative health record on one card, recommended for use in South Carolina schools. It is suggested that the 1951 edition be continued in use for students for whom it has already been set up and that the 1962 revised edition be used for others receiving this service for the first time. This record is accompanied by a special referral form and a manual for its use.

Health Appraisal Form for Periodic or Special Referral (Form B), 1962

This form was developed for convenience in securing information for the cumulative record from the parent, the physician, the dentist, and others. It is like the cumulative record except that it is designed for one appraisal only.

South Carolina Manual for Use of the Cumulative School Health Record, Revised 1962

Recommendations for the use of the record and explanation of its contents are discussed in this booklet. This information is important for effective planning for services and for entering information on the cumulative record over a period of 12 years.

These materials were developed by the South Carolina Joint Health and Education Committee of the State Department of Education and the State Board of Health. They are printed and distributed at cost by the State Department of Education as a service to schools. An order form including a price listing is available with sample copies of the revised record forms and manual. Please address orders to: Supervisor of Health Education, 802 Rutledge Bldg., Columbia 29201.

TABLE FOR TRANSPOSING NORMS TO LETTER GRADES*

Grade	*Percentile Scores*	*T-Scores*	*Sigma Scores*	*Hull Scores*	*Grade*
A	97-100	68 up	82 up	77 up	A
A—	94-96	65-67	76-81	72-76	A—
B+	86-93	62-64	71-75	68-71	B+
B	78-85	58-61	65-70	63-67	B
B−	70-77	55-57	59-64	58-62	B−
C+	58-69	52-54	54-58	53-57	C+
C	45-57	48-51	48-53	48-52	C
C−	32-44	45-47	42-47	43-47	C−
D+	24-31	42-44	37-41	39-42	D+
D	16-23	38-41	31-36	34-38	D
D−	8-15	35-37	25-30	29-33	D−
F	7 down	34 down	24 down	28 down	F

*Based on the distribution:
7% — A
24% — B
38% — C
24% — D
7% — F

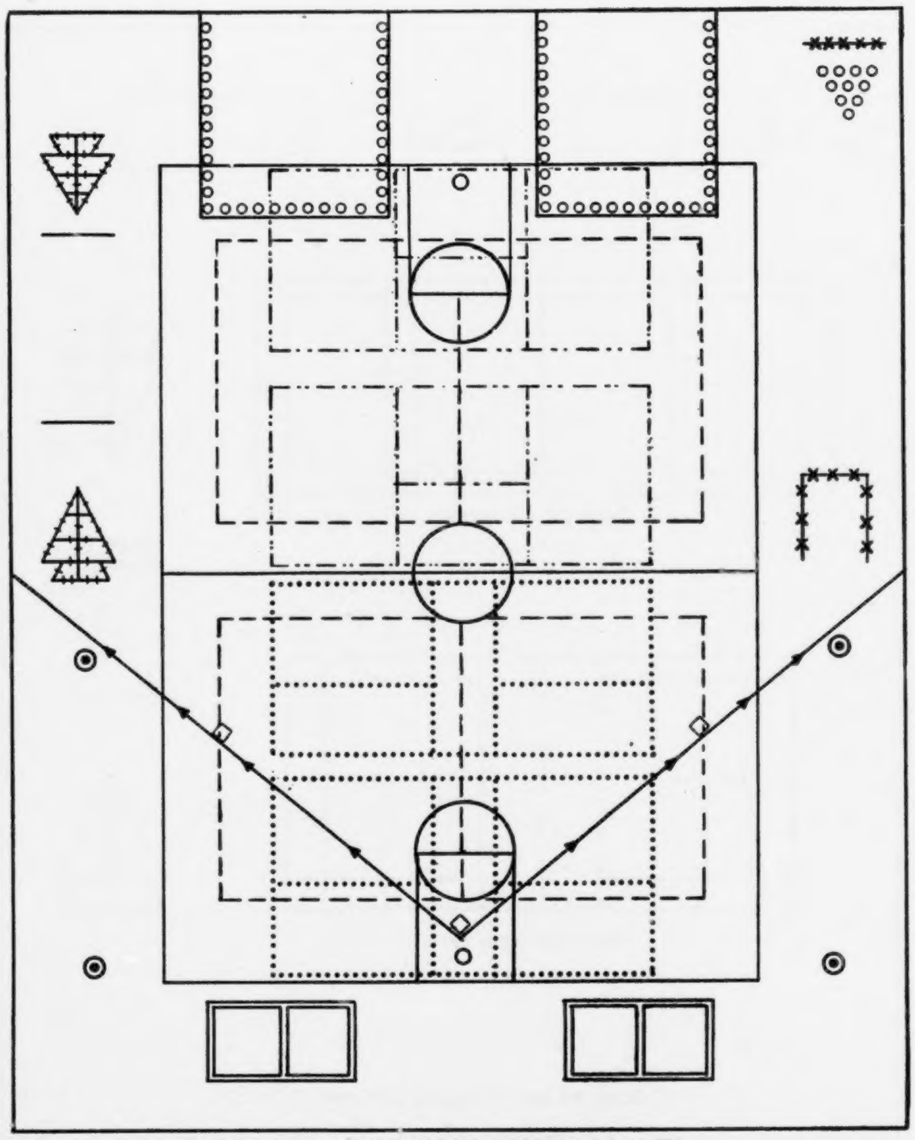
T-Scale: Mean of 50 and standard deviation of 10
Sigma Scale: Mean of 50 and standard deviation of 16.67
Hull Scale: Mean of 50 and standard deviation of 14.29

APPENDIX C

UTILIZATION OF FACILITIES

Much of the quality of the physical education program will depend upon the available facilities. The indoor facilities should include a gymnasium, shower and dressing rooms, instructor's offices, laundry, separate varsity dressing rooms, storage rooms, and a classroom.

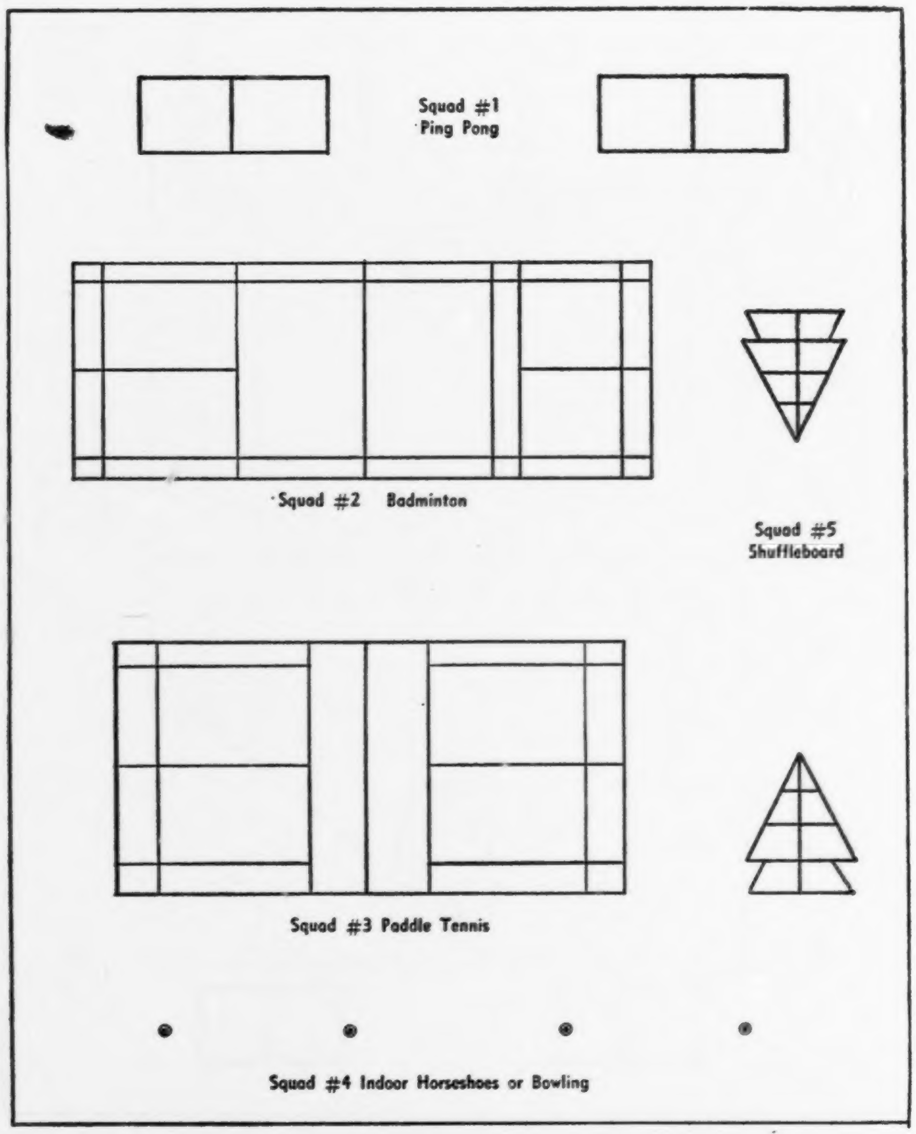
The outdoor space should be large enough for teaching a variety of activities. Every school should have an outdoor paved area equipped with adequate screen for tennis. There is a need for backstops and graduated chinning bars.



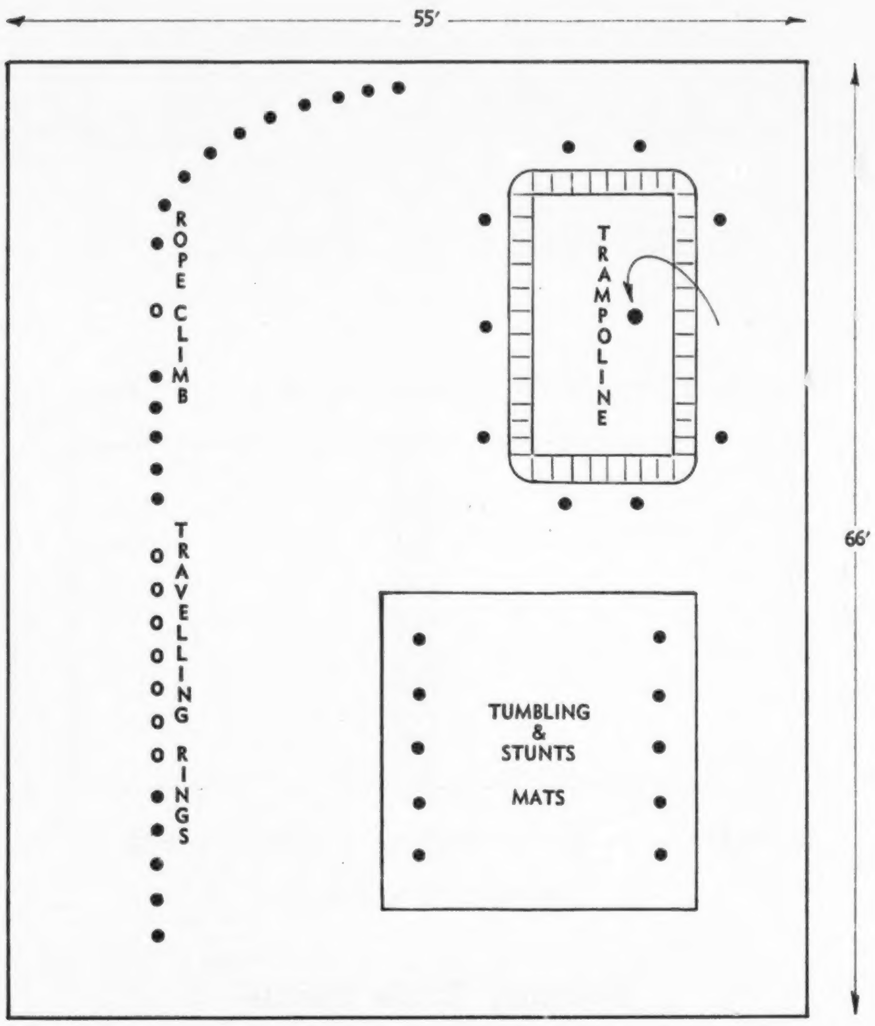
Planning Indoor Activities in Gym

	Code	
basketball	————	(should be painted black)
volleyball	— — — — —	(should be painted red)
paddle tennis	··················	(could be painted dark green)
badminton	—··—·—··—	(could be painted light green)
handball	ooooooooo	(could be painted orange)
shuffleboard	+++++++++	(could be painted blue)
indoor softball, kickball, etc.	→→→→→	(could be painted gra)
bowling	×—×—×—×—×	(could be painted white)
indoor horseshoes	◉ ◉	(could use this area)
table tennis	◫	(could use this area)

Note: All lines should be ½″ wide and solid, except basketball and volleyball which are 2″ wide.



Rotating squads method illustrated above: many combinations can be worked out to utilize available facilities and class sizes with planning.



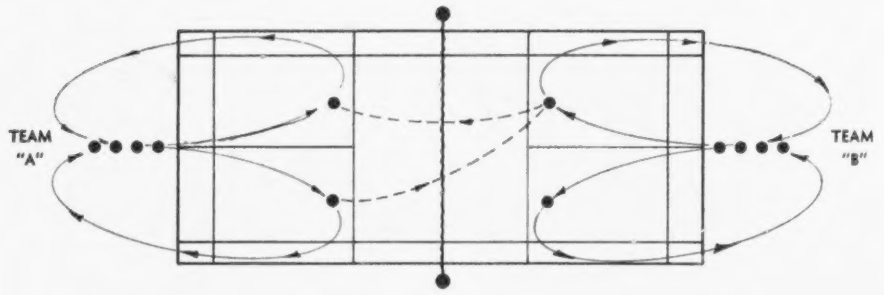
***Station Method For Indoor Program With Squads of Ten**

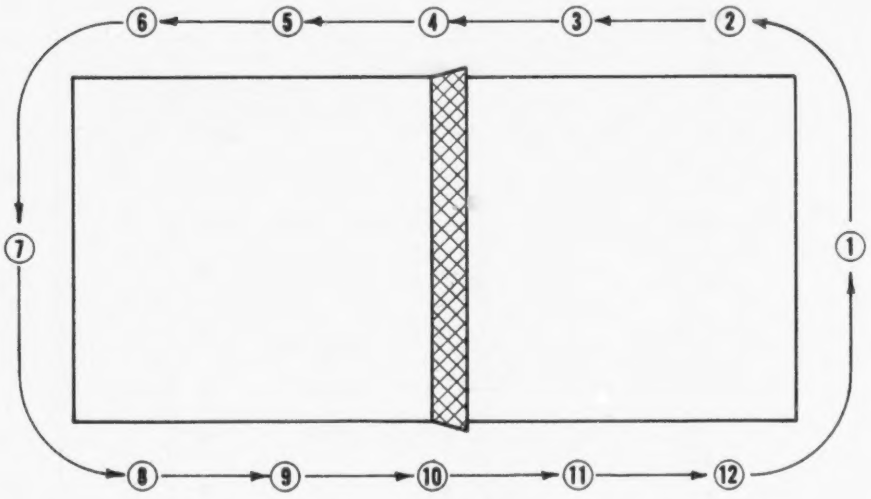
Multiple Badminton

Play as in regular Badminton except:

1. Team Score.
2. Arter "play" of the shuttlecock, that player moves immediately off the court as in figure 64. When play is in the center, move off to the right of court.
3. Recommend a recquet for each player.
4. Inexpensive metal racquets are practical.

01217





*Rotating Table Tennis

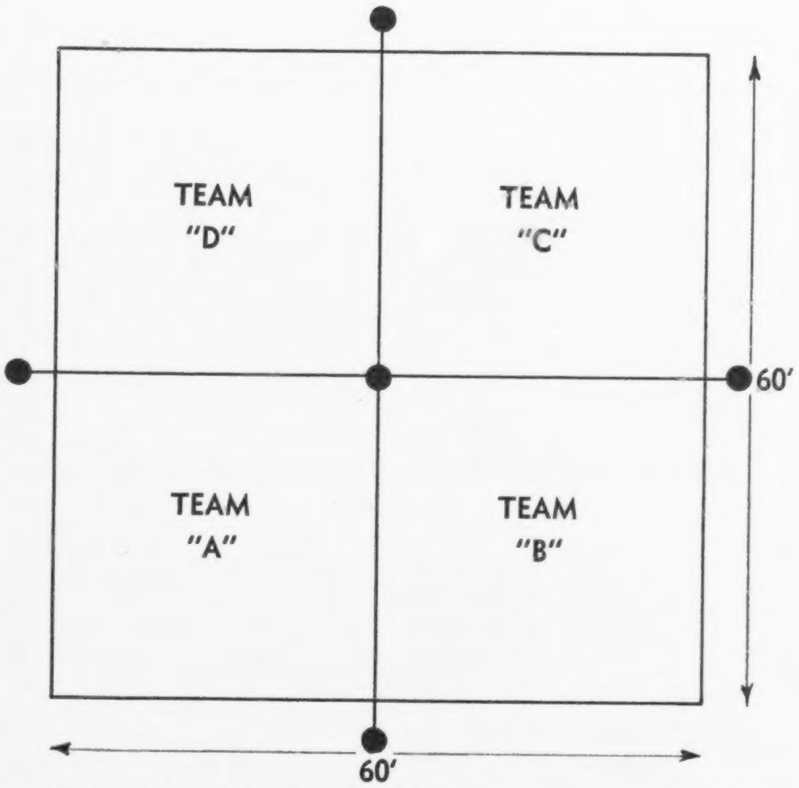
Rotating Table Tennis

#1 serves; #7 receives, players rotate counterclockwise. When a player fails to return the serve or volley, he receives a mark against him. When a player receives 12 marks, he is eliminated. At this point all marks are eliminated from the remaining players and succeeding players are eliminated upon receiving 5 marks.

Teams are Evens vs. Odds to 21 points as in regular table tennis.

Four-Way Volleyball and Four-Way Bounce Volleyball

6 to 15 players in each court constitutes a team.



*Four-Way Volleyball and Four-Way Bounce Volleyball

Serve—Rotates counterclockwise. Use 1 to 4 balls as groups progress play. The serve must clear the net.

Volley—Same as volleyball, after the serve play can be to any court.

Scoring—Negative score is recorded; team with the lowest score when first team against them reaches 21 is the winner.

Four-Way Bounce Volleyball can be played without nets. The serve is the same as in table tennis. Only one bounce is permitted in a court. Otherwise the same rules as in volleyball.

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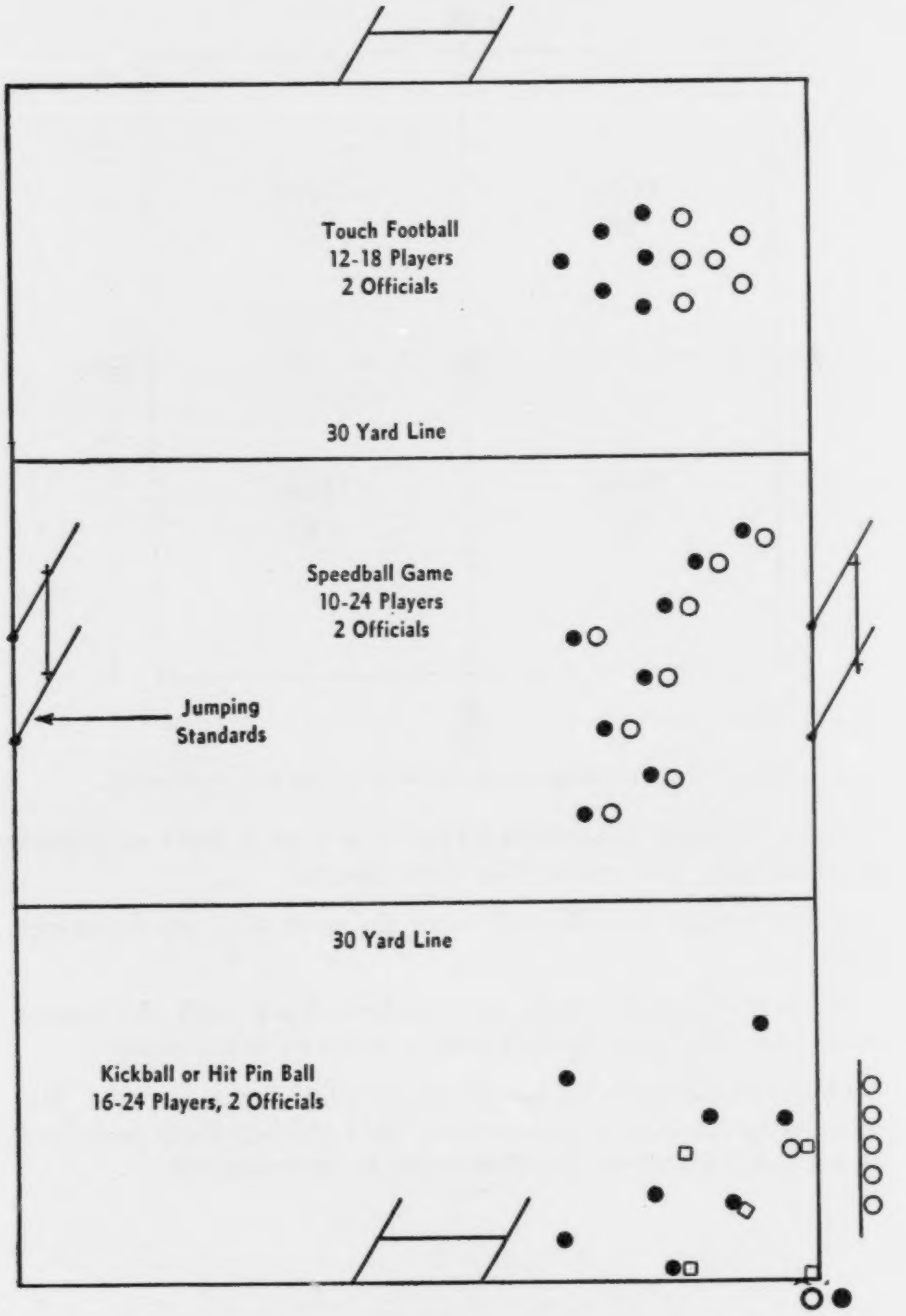
*Reference. Minor Sports Reach a Majority, Wofford College.

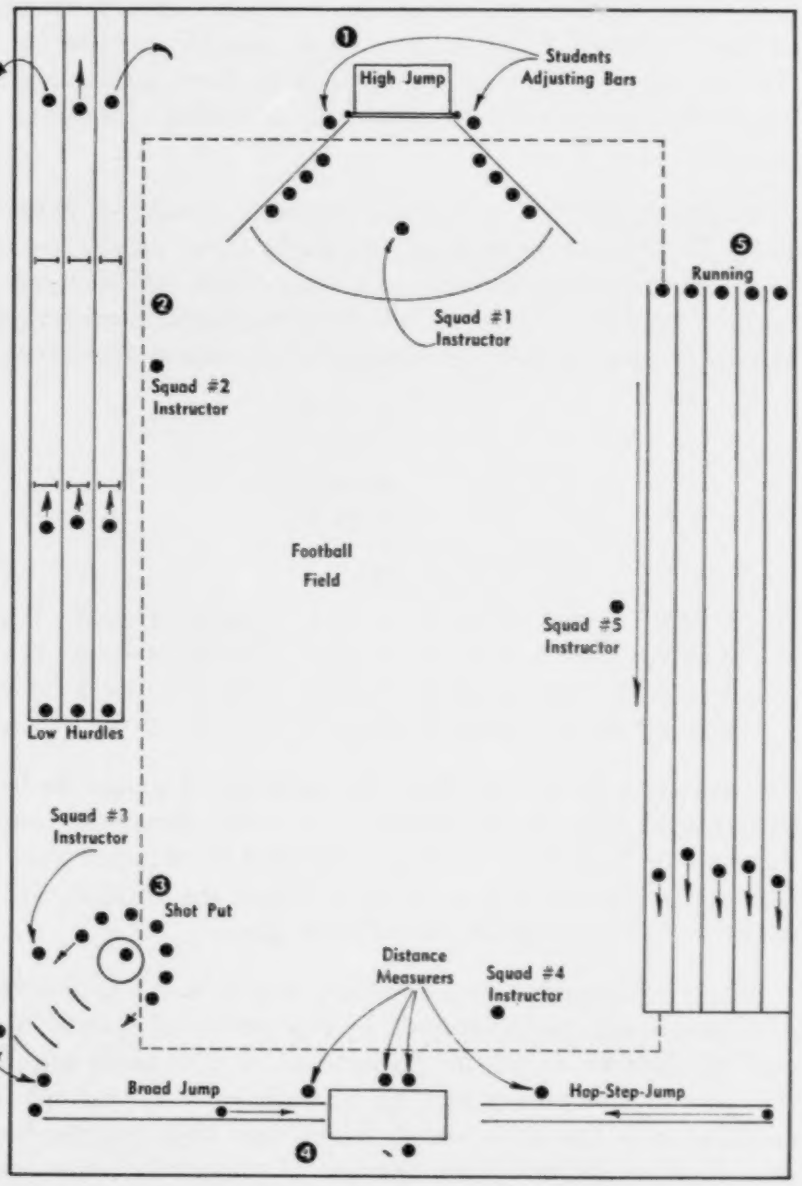


Multiple use of football field, large or small classes, and dual uses for boys and girls

Organization Chart of Participation Area

Grass field (no cinder track)

Class enrollment 50



Squads rotate counter-clock-wise on the Signal to move.

APPENDIX D

TOURNAMENT DESIGN

A round-robin tournament can be easily drawn up for teams of any number; however, the most suitable number is from 4 through 12. If more teams are available, form additional leagues. Play-offs may be used to determine the final champion if time permits.

An example of a 7 or 8 team league is presented. Note that by using X as the eighth team, an eight-team league is complete. Team number one remains constant while other teams rotate counter-clockwise. There will be one less round than actual teams. If two or more rounds are desired, just repeat the process.

1 vs x
2 vs 7
3 vs 6
4 vs 5

Thus:

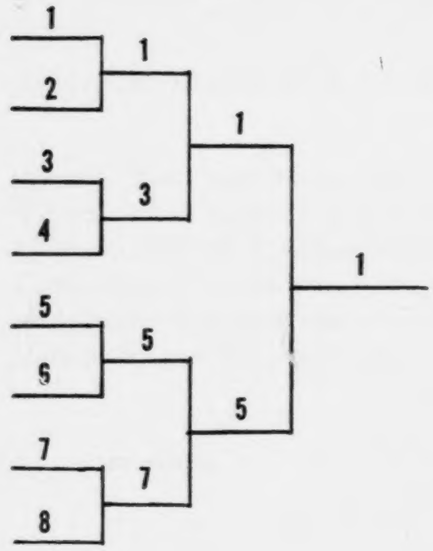
1 vs x	1 vs 7	1 vs 6	1 vs 5	1 vs 4	1 vs 3	1 vs 2
2 vs 7	x vs 6	7 vs 5	6 vs 4	5 vs 3	4 vs 2	3 vs x
3 vs 6	2 vs 5	x vs 4	7 vs 3	6 vs 2	5 vs x	4 vs 7
4 vs 5	3 vs 3	2 vs 3	x vs 2	7 vs x	6 vs 7	5 vs 6

The easiest way to determine the number of games to be played in a round robin tournament is to write down the number of teams: 7, 6, 5, 4, 3, 2, 1. Cancel the highest number and add the remaining figures 6, 5, 4, 3, 2, 1. Since the total is 21, the instructor knows he must plan for 21 games.

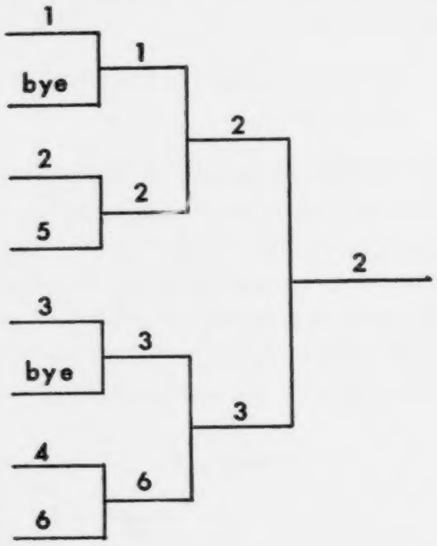
Single elimination tournaments, which are less desirable but often necessary, can be formed by any power of 2, thus: 2, 4, 8, 16, and 32. Sixteen teams or players make a suitable number. Use the next higher power and fill in with byes so that all byes are eliminated in the first round. Remember that quarter-finals and semi-finals must have even number of players or teams, except in tournaments of less than eight teams. Always schedule byes in the first round of the single elimination tournament.

The following bracket (Figure A) illustrates a single elimination tournament consisting of six teams with two byes in the first round. Bracket B illustrates a single elimination tournament consisting of eight teams with no byes necessary.

A



B



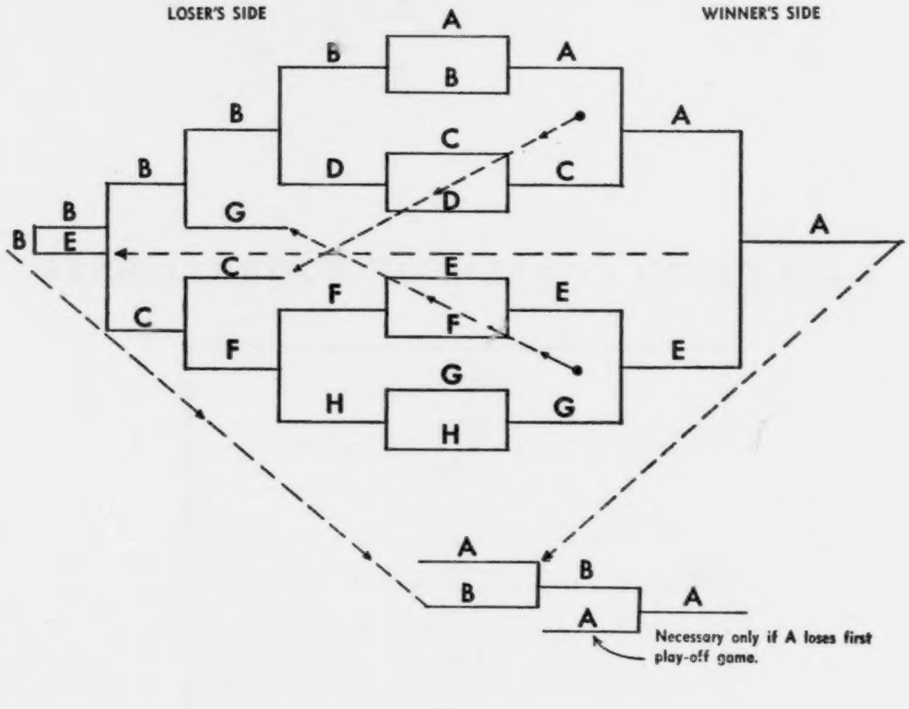
LADDER OR CHALLENGE TOURNAMENTS

•	Bill	•
•	Max	•
•	John	•
•	Mike	•
•	Joe	•
•	Ted	•
•	Roy	•
•	Jim	•
•	Henry	•

This type of tournament is excellent for individual sports: horseshoes, ping-pong, etc. For doubles just add names of partners. A player may challenge either of the two players above. If the player in the lower position wins, they change places. Challenges may not be repeated for a period of 24 hours. Player on top at the designated date is the winner. Ladders may be designed in several economical ways—clothes pins with names printed on them placed on an upright stick anchored or tabs hung on small nails, etc.

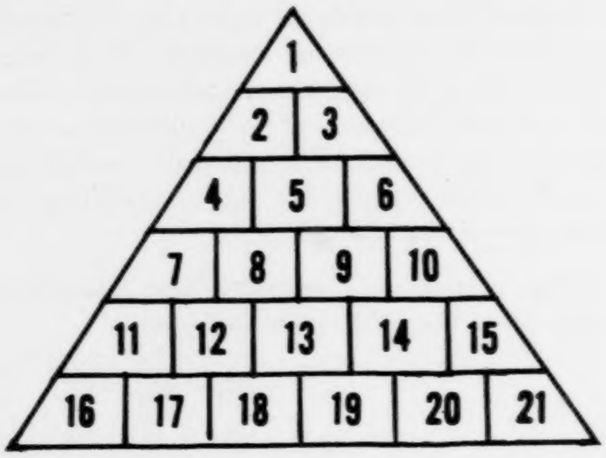
If the number of entrants exceeds 12, it is wise to use two or more ladders.

Double elimination tournaments are sometimes used, having the advantages of allowing a team to try at least twice for the championship. Eight teams of players make a suitable number for such a tournament. An eight team tournament is presented. A greater number of teams or players create time and scheduling difficulties. Always schedule byes in the first and second rounds of a double elimination tournament.



PYRAMID TOURNAMENTS

Using a similar system, the pyramid tourney may be successful. If lesser number, blot out areas from bottom, outside in.



A player may challenge any player on the line above. If the player on the lower level wins, they change places. Challenges may not be repeated within 24 hours. A given date will designate the champion.

APPENDIX E

EQUIPMENT AND SUPPLIES

All schools do not need to purchase all equipment listed, since it is virtually impossible to teach all activities. Certainly, the program content and the number of students being taught will be guidelines for purchase of equipment and supplies. The boys' and girls' program should be cooperatively planned so there will be no duplication of equipment. For example: volleyball for girls in the fall and in the spring for boys; tumbling for girls in November and in February for boys.

The following amounts of supplies and equipment for secondary schools seem desirable as a *minimum*:

Enrollment	50	51-150	151-300	301-500	501-900	901-
Archery arrows	30	30	40	40	50	50
Archery bows	2	2	4	9	10	12
Archery targets	1	1	2	3	4	4
Badminton sets	1	1	2	2	2	2
Balance beam	1	1	1	1	1	1
Basketballs	1	2	2	4	4	4
Buck	1	1	1	1	1	1
Climbing ropes	2	2	2	2	2	2
Croquet sets	1	1	2	2	2	2
Deck Tennis rings*	1	1	2	2	2	2
Field Hockey sets	1	1	2	2	4	4
First Aid kits	1	1	2	2	2	2
Footballs (touch)	1	2	2	4	4	4
Golf Clubs & Golf Balls	12	12	24	24	36	36
Gym-Bowl kits*	1	1	2	2	2	2
Gym mats (5′ x 10′)	2	4	6	8	10	10
Hand balls	1	2	2	4	4	4
Horizontal bar	1	1	1	1	1	1
Horseshoes*	1	1	2	2	2	2
Inflators	1	1	2	2	3	3
Jumping ropes	12	24	36	48	48	48
Launderette	1	1	1	1	1	1
Marker (lime)	1	1	2	2	2	2
Paddle Tennis sets*	1	1	2	2	2	2
Parallel bars	1	1	1	1	1	1
Peg boards	1	1	1	1	1	1
Playground balls	1	1	2	2	4	4
Record player	1	1	1	1	1	1
Rhythm records	24	24	24	24	36	36
Rings	2 pr.	2 pr.	2 pr.	2 pr.	2 pr.	2 pr.
Shuffleboard sets*	1	1	2	2	2	2
Side horse	1	1	1	1	1	1

(Continued)

Enrollment	50	51- 150	151- 300	301- 500	501- 900	901-
Soccer balls	1	2	2	4	4	4
Softballs	6	6	12	12	18	18
Softball bats	2	2	4	8	10	12
Speedball (soccer ball)	1	2	2	4	4	4
Spring board	1	1	1	1	1	1
Standards for nets	4	4	6	6	8	8
Stop watch	1	1	2	2	2	4
Table Tennis sets*	1	1	2	2	4	4
Take-Off board	1	1	1	1	1	1
Tape Measure	1	1	2	2	2	2
Tennis Rackets & Tennis Balls	12	12	24	24	36	36
Towels	A clean towel and soap for each student, purchased by school, and laundry service supplied by school.					
Uneven Parallel Bars	1	1	1	1	1	1
Volleyballs	1	2	4	4	4	4
Volleyball nets	1	2	2	4	4	4

*Teaching several activities in recreational sports will lessen the cost of equipment and supplies. Those activities marked with an asterisk can be taught as a unit by planning full utilization of facilities and supplies.

Standard equipment for boys' dress include a sleeveless jersey, trunks, cotton or wool socks and *gym shoes*. A light-colored cotton suit of one-piece construction is recommended for girls, with socks and *gym shoes*.